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POLLUTION OF THE INTERSTATE WATERS OF THE GRAND CALUMET RIVER, LITTLE CALUMET RIVER, CALUMET RIVER, WOLF LAKE, LAKE MICHIGAN, AND THEIR TRIBUTARIES, INDIANA-ILLINOIS. PROCEEDINGS OF CONFERENCE, SESSION (2ND) RECONVENED AT CHICAGO, ILLINOIS, ON AUGUST 26, 1969

Federal Water Pollution Control Administration
Washington, D. C.

26 August 1969

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RECONVENED 2ND SESSION
OF THE
CONFERENCE
IN THE MATTER OF
POLLUTION OF THE INTERSTATE WATERS OF THE GRAND CALUMET RIVER, LITTLE CALUMET RIVER, CALUMET RIVER, WOLF LAKE, LAKE MICHIGAN, AND THEIR TRIBUTARIES IN THE STATES OF INDIANA AND ILLINOIS

2nd Session held

December 11-12, 1968
January 29, 1969

Chicago, Illinois

Reconvened

August 26, 1969

Chicago, Illinois

TRANSCRIPT OF PROCEEDINGS

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CONTENTS

	PAGE
Murray Stein	5
Carl L. Klein	10
E. E. Minney	18
R. E. Mann	21
H. H. Caldwell	25
G. Marks	28
J. Karaganis	30
L. W. Bieker	37
Mrs. R. E. O'Brien	41
Mrs. L. W. Bieker	43
Committee on Lake Michigan Pollution	46
Mrs. G. Capstaff	48
Mrs. R. B. Bishop	49
G. A. Peterson	52
C. Pemberton, Jr.	59
V. W. Bacon	78
B. T. Lynam	102
A. J. Mikva	127
G. J. Gockstetter	132
H. J. Dunsmore	182

CONTENTS (Continued)

	PAGE
B. A. Poole	227
C. W. Klassen	238
M. Gamet	242
Summary	248
L. D. Spears	259

- - -

The conference in the matter of pollution of the interstate waters of the Grand Calumet River, Little Calumet River, Calumet River, Wolf Lake, Lake Michigan, and their tributaries in the States of Indiana and Illinois convened at 9:30 a.m., Tuesday, August 26, 1969, at the Illinois Room, LaSalle Hotel, Chicago, Illinois.

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August 26, 1969

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PROCEEDINGS

OPENING STATEMENT
BY
MURRAY STEIN

MR. STEIN: The conference is open.

This session of the Conference in the Matter of Pollution of the Interstate Waters of the Grand Calumet River, Little Calumet River, Calumet River, Wolf Lake, Lake Michigan, and Their Tributaries in the States of Indiana and Illinois is being held under the provisions of Section 10 of the Federal Water Pollution Control Act, as amended. Under the provisions of the Act, the Secretary of the Interior is authorized to initiate a conference of this type when requested to do so by a Governor of a State and when on the basis of reports, surveys, or studies,he has reason to believe that pollution subject to abatement under the Federal Act is occurring.

The first session of the conference was

held in March 1965 at Chicago. We had a technical session on January 4-5,1966. The conference was reconvened in executive session on January 31 - February 1, 1966. The conference conclusions were announced at a public meeting held February 2, 1966. We also had a second session of the conference in December 1968 and January 1969. In addition, we have had two progress evaluation meetings in connection with this conference.

Let me try to give some perspective in this. As a result of this Federal-State enforcement conference, we probably have occasioned the largest municipal industrial cleanup of wastes which contribute to water pollution that we have had in the country. This has cost many millions of dollars. You have seen the results throughout the lake and particularly in the lower end of the lake. We have many, many industries and cities involved. I think that all hands are agreed, whether it is the municipalities, the industries, the State government, the local governments and the Federal Government, as to what has to be done. There appears to be no disagreement on that. The question that we are concerned with is when this is going to be done.

For most of the cities and the industries in the area, we have had compliance with schedules; works have been put in and they are operating. There are several industries that we have to look at rather carefully today to see if they are in line with this schedule. The purpose of this conference is to bring together the official State agencies and the Sanitary District, representatives of the United States Department of the Interior, and other interested parties to review the existing situation and to lay a basis for future action by all parties concerned and to give the States, localities and industries an opportunity to take any indicated remedial action under State and local law.

Conferees here represent the States and the Sanitary District.

Indiana is represented by Mr. Blucher Poole.

The Federal conferee, to my left, is Mr. H. W. Poston, Regional Director.

To my far right is Mr. Clarence Klassen of Illinois.

Mr. John Egan of the Sanitary District.

And to my right is the Assistant Secretary of the Department of the Interior, the Honorable Carl L. Klein.

And my name is Murray Stein.

We will make a transcript of the conference which will be available to you through your State agencies and you can apply to them for that and keep up the normal Federal-State relationships.

I would ask that anyone other than the conferees making a statement come to the lectern and identify himself as to name and organization, for the purpose of the conference.

As I pointed out, this conference is designed to get at the dates of these time schedules. However, I am aware that there are several people in the audience who would like to make statements. Most of the people who have talked to me have indicated that their statements are very short. I would hope, since we have been over this ground so many times, that the people who will make these statements--and we are not going to keep anything out of the record, anything that is pertinent will be put in the record and you will have an opportunity to say what you feel you have to say, but I ask you to please try to keep the statement as short and as succinct as possible. As we proceed, or in the first break, it would be appreciated if anyone who wishes to make a statement other than the official agencies concerned and the industries, that is citizens groups and others, would get in touch with Mrs. Piere--would you stand up, Mrs. Piere--give her your name and the length of your statement, and we will try to arrange for your appearance as soon as we possibly can.

For the first statement of the conference, it is indeed a pleasure for me to call upon my boss, and I am very fortunate to have a boss like this who has a long and distinguished career in fighting for water pollution control and clean water, the Assistant Secretary for Water Quality and Research of the Department of the Interior, the Honorable Carl L. Klein.

THE HONORABLE CARL L. KLEIN
ASSISTANT SECRETARY FOR WATER QUALITY AND RESEARCH
UNITED STATES DEPARTMENT OF THE INTERIOR

MR. KLEIN: Good morning. We have some copies of the transcript and there are more being made by FWPCA for the press, radio and television.

But before I start on my statement, there are in the audience two people who deserve recognition, a young man of twelve years of age, Mr. Dyroz, and Mr. Joseph Chantigney of the Cook County Clean Streams Committee. I saw them back here a minute ago. These two, this 12-year-old boy and Joe Chantigney, are getting the Little Calumet cleaned up of all the debris by themselves. This is citizens antipollution control and I thank them for the work they are doing.

Questions have been raised about the reconvening of the Calumet River conference today, particularly the recent reference to the Secretary on two problem areas: U. S. Steel and Republic Steel.

The issue is at what point does the

Federal Government take the initiative in combatting local pollution.

Secretary Hickel and I took office in February and March 1969, and we found that we had inherited a problem. U. S. Steel and Republic Steel had not completed all of their antipollution measures by December 31, 1968. This was the time schedule. And therefore, we now had a problem:

How do you get this pollution abated and how fast can you get it done? It is too late to meet the time schedule. How fast now can we get the work done and meet the problem.

A chronological review of the events of the previous convening is necessary.

This conference last convened on December 11 and 12, 1968, with an executive meeting thereon on January 29, 1969. At those meetings testimony was given on the progress of antipollution measures for the Calumet River. The States of Illinois and Indiana testified on the status of antipollution measures under their respective jurisdictions. The conferees then took appropriate action on this item.

Hon. Carl L. Klein

However, the Metropolitan Sanitary District of Chicago (MSDGC) offered no testimony on the United States Steel Corporation or Republic Steel Corporation. The record is strangely silent on these two companies.

Without such testimony, the Calumet River conference recommended referral of these two problems, U. S. and Republic Steel, to the Secretary of the Interior. This was not a unanimous decision.

The Secretary of the Interior then had to secure his own testimony and evidence to determine the Department position. Chronologically, the data we have is as follows:

(1) United States Steel delivered their plans to the Metropolitan Sanitary District of Greater Chicago in November of 1968.

(2) Republic Steel delivered their plans to Metropolitan Sanitary District of Greater Chicago on December 6, 1968.

(3) Thereafter--and I call to your attention it is thereafter--the Metropolitan Sanitary District of Greater Chicago participated in this December 11-12, 1968, enforcement conference here and said nothing about

the proposals and plans of these two companies. This information was kept secret.

(4) Federal Water Pollution Control Administration has determined that Republic Steel had already completed about 40 percent of its work by December 31, 1968, and that their present work is to complete the final 60 percent. On April 11, 1969, Republic Steel broke ground for a complete recirculating pollution abatement plant which, as I understand it, is about seven days ahead of their completion schedule. Their final date is December 31, 1970.

(5) United States Steel, as I understand it, is still awaiting word on its pollution abatement plans. The State of Illinois has not yet been formally notified of the November 1968 delivery of plans; neither has the Federal Water Pollution Control Administration. It is my understanding that the plans and timetable for completion are agreed, but that no meeting of the Metropolitan Sanitary District of Greater Chicago trustees has been called to validate the plans and timetable--despite the lapse of nine months.

(6) There has been on file in the

Circuit Court of Cook County a suit for temporary and permanent injunction; the temporary injunction was issued March 22, 1968, and was upheld later in the Supreme Court of Illinois. The plaintiff is the Metropolitan Sanitary District; the defendant is United States Steel. A stipulation was prepared providing for U. S. Steel to comply by December 31, 1970. This was not made public and FWPCA did not secure a copy until August 15, 1969. I was informed yesterday that U. S. Steel has agreed to the terms of the stipulation to reduce this pollution abatement problem.

Several disquieting questions arise from all this:

First--Why was the availability of the U. S. Steel and Republic Steel plans not disclosed at the last conference? Why has this information been kept from the public? Is this withholding of vital information either at public conferences or at correspondence levels. to be an example of future local-State-Federal relationships?

Second--We would like to know why the matters were referred to the Department of the Interior.

All of the conferees here are aware of the time-consuming delays built into the lawsuit process of the Federal Water Pollution Control Act in this case. For the public's information, the Federal process would entail:

First, a 180-day notice or 6 months to the State of Illinois requiring compliance.

Second, after the 180-day notice time has passed, convening of a hearing board to determine the propriety of Illinois' action.

And third, again after the hearing board action, a final 180-day notice to Illinois and to polluters before filing suit.

There are several discrepancies to be found in this procedure here.

First of all, the State of Illinois could and undoubtedly would cure the defects, thus rendering the referral to the Secretary unnecessary.

Second, and this is the important one, the delay of fifteen to eighteen months in going to a Federal lawsuit is intolerable. The pollution could and should be abated well before this time.

Third, the Metropolitan Sanitary District of Greater Chicago already has a lawsuit on file and could have completed the hearings by now. Yet nothing has been done on this suit for almost a year. The public has a right to full disclosure of all the facts, testimony and evidence on these matters. If it is possible by any means, I want pollution abatement now. If I can't have it now I want it just as soon as I possibly can get it.

So far, the nine-month delay on U. S. Steel has resulted in nine additional months of polluting the Calumet River. The delay must not continue; action must begin immediately and must be complete. Pollution must be the loser.

And now we must decide the issue.

At what point must the Federal Government take the initiative in combatting local pollution? I think it is clear that the Federal Government should step in when local enforcement procedures have broken down and become ineffectual.

The conferees will have to decide whether the Metropolitan Sanitary District of Greater Chicago has the power and the duty and the authority and the will to complete the fight against pollution in the Calumet River.

Since the State of Illinois representative has asked my office that the State retain jurisdiction, I am sure that the State of Illinois will complete whatever action is needed in this matter.

However, if the local and State authorities find that they cannot or have not handled a pollution problem promptly and properly, and this applies not only to the Calumet River but elsewhere in the United States, then the Federal Government will step in and follow the procedures required by the Federal Water Pollution Control Act. The conferees here will have to decide whether local and State responsibility and authority has so broken down that only the Federal Government can secure compliance.

If that be the case, we have already had our lines of authority set up if that be the decision of this conference.

I expect all conferees here today to take all of the necessary steps to win the battle against pollution and win it now.

Thank you.

MR. STEIN: Thank you, Secretary Klein.

MR. KLEIN: You will excuse me, Murray. I have got a 12 o'clock plane to make.

MR. STEIN: Yes. Thank you very much.

Of course all the parties will have an opportunity to comment on this, but I think it might be well to have a few of the short statements first from the people who have come here so the parties concerned possibly can have a little more time to think and prepare their replies.

First I would like to call on Mr. E. Eugene Minney of the Indiana Izaak Walton League, who has a short statement.

Mr. Minney.

E. EUGENE MINNEY, CHAIRMAN
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MR. MINNEY: Mr. Chairman, members of the conference.

E. E. Minney

My name is E. Eugene Minney and I represent the National and Indiana Division of the Izaak Walton League. I am also President of the Northwestern Inter-Chapter Council, which consists of fifteen different chapters of the Izaak Walton League in Lake, Newton and Porter Counties.

My statement this morning will be very brief, because we of the Izaak Walton League feel that all the talk has been done. Anything that has to be said about the technological aspects of this problem here has already been stated over and over and over. So now we feel is the time for action. Now we feel is the time to find out why things haven't been done.

We also feel that deadlines, extensions of deadlines, should be at an absolute minimum. When I say minimum, I mean no more than 1970. If Bethlehem Steel can complete a facility consisting of a hot strip mill, a plate mill, a tin mill, and a coal strip mill in a period of two years, there is no reason in the world why these problems haven't been taken care of by these particular companies since 1965.

The Izaak Walton League would like to take this opportunity to thank Inland Steel Company for opening their doors to us, for showing us their problems, for showing us what they were doing. We asked the other companies at the conference the last time we were here to invite us in and let us see what they were doing, but we have never had the invitation.

When we asked Inland Steel to let reporters from the Hammond Times come in there with us, they opened their doors, invited us in and showed us everything they had. They have completed eleven of twelve projects at a cost of about $7 million and they have done it since 1965.

So I beg you, gentlemen of the panel, please, no more extensions. Please, no more talk. But let us see some action.

Thank you.

MR. STEIN: Thank you, Mr. Minney.

Any comments or questions?

If not, may we call on Representative Mann of Illinois.

Mr. Mann.

ROBERT E. MANN
STATE REPRESENTATIVE
ILLINOIS GENERAL ASSEMBLY
CHICAGO, ILLINOIS

MR. MANN: Mr. Chairman. My name is Robert E. Mann. I am a member of the Illinois House of Representatives representing the 24th Legislative District, which includes the communities of Kenwood, Hyde Park, Woodlawn and South Shore, all adjacent to Lake Michigan. I am also Co-chairman of the Democratic Study Group of the Illinois House of Representatives. However, this statement today is issued on behalf of myself and a large number of my constituents who are vitally concerned about water and air pollution.

As I view the proceedings of this conference and the sessions which have preceded it, I detect a fragmented approach to the pollution problems which plague Lake Michigan and our society in general.

And I would say to my former colleague, Carl Klein, that I do not think that the Federal Government has to wait for the local government to act. This is not an either/or procedure. I think both governments ought to be acting at top speed at once.

Water pollution abatement measures must be closely linked with landuse management, with emphasis on the disposal of solid wastes. In turn, air pollution abatement is directly related to land and water management issues.

If we are to clean up Lake Michigan, alternative disposal sites must be found for the thousands of tons of waste matter that are daily discharged into the lake. Since the air is not a suitable alternative, the wastes must be disposed of on land sites which are geologically and environmentally suited for such disposal. Programming action to reduce the discharge of pollutants into the lake without also programming for the disposal of these wastes on land sites is an incomplete exercise of questionable importance. Until we, as a society, take a total environmental approach to problems of environmental quality, our efforts here today likely will result in minimum improvements.

Until the polluting industries precisely designate where the waste products are to be utlimately disposed of, our efforts at such conferences as this result in futility. Simply to transfer the location of pollution cannot be considered a satisfactory answer to our environmental problems. For example, to scrub particulate matter from the air and dispose of the waste into the lake does not accomplish any antipollution objective.

I think that rather than discuss the possibility of extending the conference deadlines, we should seek to see that all pollution abatement measures which were called for by the earlier conference should be in place and operable by the end of December 1969. The Empire State Building was built in 18 months. It is hard for me to see that some of the pollution abatement measures technically called for by this conference could not be fabricated and put in place by the end of this calendar year. As evidence of good intentions to move toward a total environmental approach to the problems of Lake Michigan pollution, I would call for the early completion of all abatement measures called for in an earlier session of this conference by the end of this calendar year. This would constitute a first step and an indication on the part of the industries involved of their intent to assist public efforts here to reclaiming and preserving a suitable environmental quality.

I am going to conclude, but by way of example I would like to suggest the following schedule which was set by the Metropolitan Sanitary District and applied to the Motors Oil Refining Company:

On August 5 this company was notified by letter that the company was in violation. On August 11 there was a court date. On September 10 they were to report back to court. On December 9 the facilities **are** to be operative. All of these dates are in 1969. One hundred twenty days were allowed to design and construct abatement facilities.

This is a small company with limited resources. I do not see why larger companies cannot be called upon for the same schedule.

In conclusion, I ask the Attorney General to utilize the enforcement powers granted to him by the last session of the Illinois General Assembly. This action should be taken immediately in order to penalize polluters and to serve notice upon others that the State of Illinois will not tolerate further degradation of the lake.

Thank you.

(Applause.)

MR. STEIN: Thank you, Mr. Mann.

Are there any comments or questions by the conferees?

If not, we didn't plan it this way, but we can hear from the Attorney General's Office, because next we have Henry H Caldwell, Assistant Attorney General of Illinois.

Mr. Caldwell.

HENRY H. CALDWELL, CHIEF
AIR-WATER POLLUTION CONTROL DIVISION
OFFICE OF ATTORNEY GENERAL WILLIAM J. SCOTT
CHICAGO, ILLINOIS

MR. CALDWELL: Gentlemen, I wish to thank you for the opportunity to address this conference.

As the other speakers have indicated to you, I think sufficiently clearly, the time for extension is past. The attitude of the Office of the Attorney General of Illinois since the 1st of July, when the Act became effective, is not to be bound by the proceedings or the acts of any board or any agency or any municipality.

In that connection we will take action, as has been suggested; we will ask courts to exercise their powers in equity; we will even ask for fines as is provided by law. We will use every judicial process which we are legitimately entitled to use to effectuate an abatement and control of pollution problems.

I wish to say this, and I speak only for myself. People want to talk about pollution. They have not demonstrated to me in the short time that I have been in this that they really seriously intend to do very much about it. The companies to which reference has been made do not find it profitable, do not find it expedient, do not find it within their budget, if you will, to build devices for pollution control. Therefore; they take the easy way out and secure an extension.

I talked to an official of one corporation and he said to me, "Why, Mr. Caldwell, the plans you propose will cost our stockholders about 2-1/2 cents per share in dividend."

Now, I am well aware that economic dislocation is part of the process of cleaning up the rivers. I am well aware that air pollution control is part of the process and that it costs money. But that does not concern me one bit.

As a court in New Jersey pointed out in substantially these words, we are well aware that economic dislocation is the inevitable result of pollution control devices.

The question is not economic dislocation. It is a question of whether we shall save human lives. We choose to follow that course and save human lives.

Thank you.

(Applause.)

MR. STEIN: Thank you. Are there any comments or questions?

If not, next we will call on Mr. Gerald Marks, former trustee of the Sanitary District and a long-time participant in the fight against pollution.

Mr. Marks.

GERALD MARKS
CANDIDATE FOR CONGRESS
WILMETTE, ILLINOIS

MR. MARKS: As a former Sanitary District trustee, I am critical of U. S. Steel for not cleaning up their pollution in accordance with the original schedule. No matter what their difficulty, I believe it was their responsibility to have acted more aggressively in this matter.

But on the other hand, we also have to learn from the errors that were made in the handling of this particular case as well as to the whole fight against pollution by government bodies. The maze of jurisdictional arguments, the conflict of standards and criteria between different jurisdictions, the conflict in personalities and the fact that every politician and aspiring politician, including myself, jump into the matter from a different point of view and create a great deal of confusion. These are all matters that are helping prevent a more rapid fight against pollution and could prevent future problems from being resolved as rapidly as they could.

I am familiar with the Sanitary District and some of their problems. I am familiar with the fact that Dr. Joel Kaplovsky, who is a former director of research and development there, informed me that as early as 1966 the negotiations between U. S. Steel and the Sanitary District for some reason fell apart. I know that the relationship between the Metropolitan Sanitary District and the Illinois Sanitary Water Board was more a fight between the two than it was a fight against pollution. These are things that I believe are causing a great deal of the problem that is manifest here today and we are not fighting pollution.

Now, we can't relive all of the things that happened during this period of time, but we sure as heck can learn from it. Let's make sure that government bodies work together in the same direction, not separately as we have had in the past. Let's make sure performance and cooperation are the bywords. We have the technology to fight pollution. We have the ability to do it. Let's not have politics and personality prevent accelerated fights in our pollution abatement programs.

Thank you.

(Applause.)

MR. STEIN: Thank you, Mr. Marks.

Any comments or questions?

If not, may we have Joseph Karaganis of the Businessmen for the Public Interest.

Mr. Karaganis.

JOSEPH KARAGANIS, ATTORNEY
BUSINESSMEN FOR THE PUBLIC INTEREST
CHICAGO, ILLINOIS

MR. KARAGANIS: Good morning, Mr. Chairman, members of the board, ladies and gentlemen.

My name is Joseph Karaganis. I am an attorney representing a foundation known as Businessmen for the Public Interest. Since the issue here today is the conduct of two major industries in relation to the control and abatement of water pollution, a foundation founded by businessmen thought it would be appropriate to state their stand on the issues being discussed here today.

Mr. Minney, of the Indiana Izaak Walton

League, raised a very pertinent question. It seemed to me that he was saying why do two major companies who have vast financial resources, who have great technological skills, as demonstrated by their places in the industry, why is it that they take so long when their counterparts in the industry have met pollution deadline schedules? Why aren't they meeting these schedules?

I happen to be representing a group of citizens that are fighting these same two companies in the field of air pollution, and interestingly enough, there is a substantial parallel between the activities of Republic Steel and United States Steel in the field of air pollution control and in the field of water pollution control.

We found, and it is demonstrated in the record of this conference in December of 1968, that pollution control facilities are normally placed on new equipment. What suffers is old equipment. I am not an economist, but it seems to me that a judgment is being made here saying that an old facility though operative has a certain useful life. That useful life may be such that it is too expensive to place controls on that facility because it is going to be retired at a short date. At the same time that facility is too useful to shut down. So they make a judgment: let's stall; let's put our investment in new facilities, in new basic oxygen furnaces, new electric furnace controls; but let's not talk about open hearths, let's not talk about blast furnace capacities. Let's just continue on as long as we can. And it is a businessman's judgment, it is an economic judgment.

Now, that was too long an answer to Mr. Minney's question, but it is a very pertinent question that this conference should decide. Should companies be allowed to make economic judgments which are detrimental to the public interest? And that is what we are talking about here and that is what all our responsibilities are.

The question that Businessmen for the Public Interest submits as the central question for this conference is whether these industries can continue to use and abuse not their assets but a public asset. The waters belong to us, the citizens, and not U. S. Steel and Republic Steel. That these industries are polluting Lake Michigan is indisputable.

There are several alternatives available to the gentlemen of this conference. At the one extreme, the industries in violation can be ordered to shut down, and several of the conferees present at this table have that power. They can be shut down until they can guarantee--and they say that it is December 31, 1970--until they can guarantee that they will not pollute. At the other extreme, the industries in violation can just be given carte blanche to continue to pollute.

The conferees sitting at this table have apparently concluded without much discussion that shutting down polluters is too radical a solution. Yet Businessmen for the Public Interest submit that businessmen who violate the law are entitled to no better treatment than any other criminal, and violating the law is what we have here. A narcotics peddler would not be allowed to sell narcotics one minute after he is discovered. An industrial polluter should not be allowed to continue pouring garbage into our air and water for years after discovered. Indeed, trafficking in pollution may be much more destructive to the public interest than trafficking in narcotics.

Nevertheless, you gentlemen apparently

have concluded that pollution will be allowed to continue as long as polluters are engaged in what you say is a good faith attempt to abate their pollution. Deadlines can come and go, Lake Michigan can continue to die and violators go unpunished.

What about the polluters who have demonstrated a clear-cut contempt for the public interest? By your action in referring the United States Steel and Republic Steel question to the Secretary of the Interior, you apparently decided that U. S. Steel and Republic Steel have acted in bad faith. Yet, as Assistant Secretary Klein clearly pointed out, the Federal Government under existing legislation is relatively impotent in controlling the kind of pollution we are dealing with today. The time schedules are much too long.

I suggest in response to the difficulties that the Assistant Secretary suggested that the Department of the Interior present to Congress, the President present to Congress, remedial legislation suggesting or requiring the Federal Government and allowing the Federal Government to take action. However, as Secretary Klein pointed out, there are other agencies who can take action on a very rapid basis here, including the Federal Government in a different Department.

Under the Federal River and Harbor Act, criminal prosecution is called for for those who pollute navigable waters. As a legal question, I don't think there is any doubt that United States Steel and Republic Steel are polluting navigable waters in violation of the Federal River and Harbor Act. Our local United States Attorney, Mr. Foran, could and should enforce this law.

The Metropolitan Sanitary District has apparently taken the position that we will sue, but if United States Steel gives us their word that they are going to stop polluting, we will settle the lawsuit. I submit that United States Steel's past actions, both in air pollution and water pollution, do not justify such trust.

Secondly, Mr. Caldwell here has made a very aggressive statement on behalf of the Illinois Attorney General. The Illinois Attorney General under recent legislation does have the power to go in and shut down a plant if necessary on a very short schedule.

And finally there was a point that

Representative Mann made, that if a Nation that can go to the moon--and I am sure that United States Steel and Republic Steel take partial credit for supplying some of the materials in the moon program--if a Nation can go to the moon, it certainly can build and install the kind of equipment that we are talking about in the shortest possible time. Remember, United States Steel was talking at one time about 1972. The 1970 figure isn't their figure; it is a compromise figure that was worked out with enforcement authorities. So that, I think, is one last bit of evidence about the kind of good faith we are talking about.

Thank you.

(Applause.)

MR. STEIN: Thank you.

Are there any comments or questions?

Just speaking for the conferees, I have two very brief comments. One, I don't think that the conferees arrived at any conclusions that I know of--and I have known these conferees for a long time--without considerable discussion. I never heard a conclusion arrived at without discussion.

And secondly, I want to make it clear for the record, as far as I understood the recommendations of the conferees, there has been no implication in the conferees' recommendations that we have made in this case that United States Steel, Republic or any other company was proceeding in bad faith. I don't see that in the record at all.

I will call on a husband and wife team, Mr. and Mrs. Troy. Who do you want to go first?

L. W. BIEKER
SAVE THE DUNES COUNCIL
MUNSTER, INDIANA

MR. BIEKER: Mr. Chairman, members of the Board.

My name is L. W. Bieker. I am a member of the Save the Dunes Council. I reside in Munster, Indiana. I am speaking today in behalf of or for Mrs. Troy, who is unable to be here.

(Whereupon, Mr. Bieker read the following letter:)

PRESIDENT
MRS. J. H. BUELL
1111 OGDEN DUNES
PORTAGE, INDIANA

Save the Dunes Council

TREASURER
MRS. J. C. B. SIMS
BOX 303
CHESTERTON, INDIANA

Please reply to: 1512 Park Drive
Munster, Indiana
46321

August 26, 1969

Chairman of Hearings
Calumet Enforcement Conference on Lake Michigan
LaSalle Hotel
Chicago, Illinois

Sir:

The Save the Dunes Council has tried for many years to conserve the quality of important parts of the shoreline and waters of Lake Michigan for the public good. Only through serious compromise allowing industrial installations on the Calument area beaches was it possible to get Congress to establish a National Lakeshore park. The methods used by industry to fulfill its wants and the effects of those industries on the waters and shoreline have been obvious and regretable.

Because of our experience we speak strongly for forceful application of controls and increased protections against the misuse of our precious water resources. We have had to look to the cooperative efforts of Illinois and Indiana state agencies to put into effect the terms of the federal controls to protect against misuse of our precious and scarce water supply. Because the lake seems large and unending as a source, we fail to recognize that this area is second in the nation in scarcity of per capita supply.

We cannot countenance any further delay or any relaxing in the standards that are required now and urge the hastening of fulfilling requirements and shortening of deadlines and equitable application of requirements. Industry has a powerful voice and a voracious appetite. Misuse of our water resources by municipalities as well as state and federal government installations only worsens the situation by setting bad precedents. We hope this conference can come to a firm decision to apply and improve controls on all of us.

Respectfully submitted,

Sylvia Troy

(Mrs.JM.)Sylvia Troy,

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MR. BIEKER: Thank you, gentlemen.

(Applause.)

MR. STEIN: Any comments or questions?

If not, thank you.

Are we going to have a statement from Mrs. Troy and the Izaak Walton League or does this constitute her statement?

MR. BIEKER: I believe there is a statement to be made by the Izaak Walton League.

MR. STEIN: Who is going to make that statement?

While that is decided, may we have Mrs. Robert E. O'Brien of the Lake Michigan League of Women Voters?

(Which said statement was given by Mrs. O'Brien as follows:)

LEAGUE OF WOMEN VOTERS OF ILLINOIS
67 East Madison St., Chicago 60603

STATEMENT TO THE CALUMET AREA ENFORCEMENT CONFERENCE

BY MRS. ROBERT E. O'BRIEN, REPRESENTING

LAKE MICHIGAN INTER-LEAGUE GROUP, LEAGUE OF WOMEN VOTERS

August 26, 1969

The Lake Michigan Inter-League Group, representing local and state Leagues of Women Voters in the four-state Lake Michigan Basin, appreciates this opportunity to express its views on pollution in the Calumet area of Lake Michigan.

Members of the League of Women Voters have been in attendance at all sessions of this conference and were profoundly impressed by the December 11, 1968, report to the conferees of the Calumet Area Surveillance Unit of the Federal Water Pollution Control Administration. In laymen's terms, industrial pollution in this area has not been greatly reduced since 1965 as had been expected when the conference made its first recommendations and established criteria. Pollution has probably increased because of the addition of sanitary and industrial wastes which have been diverted to municipal systems since 1965. For the most part, water quality has not improved in the last four years. We can only assume that the criteria and timetable for implementation have failed, both for industries and for the municipalities which by-pass treatment plants in times of storm.

We do not recommend punitive action which might delay positive action. We urge this conference to establish realistic completion dates for United States Steel Corporation and Republic Steel Corporation to comply with criteria. Following this, we ask the Metropolitan Sanitary District of Greater Chicago to move with all possible speed to adopt and implement the stipulation between the District and United States Steel Corporation on a construction program for the South Works. A similar and binding agreement should also be demanded for Republic Steel.

We further ask the Metropolitan Sanitary District to reconsider Appendix A of its Proposed Industrial Waste Ordinance before adoption. As written, that portion of the ordinance would permit all existing sewer systems to continue to discharge to Lake Michigan after the adoption of the ordinance. A "grandfather clause" of this type could set a dangerous legal precedent which could adversely affect the future of Lake Michigan. We think the original wording which prohibited outfalls to Lake Michigan is essential and in keeping with the objectives of this conference.

In view of the intermittent flow of the Calumet River to Lake Michigan, we support continued jurisdiction by this conference in all areas of its original jurisdiction.

continued

We urge immediate consideration and implementation of any remedial measures recommended by your recently appointed Technical Committee which would upgrade water quality. We cannot wait another four years for improvement in the waters of Lake Michigan and its tributaries.

All members of the League of Women Voters within the Lake Michigan Basin support the Citizens' Crusade for Clean Water which asks the United States Congress to appropriate $1 billion for this fiscal year for sewage treatment plant construction as promised by the Congress in the Clean Water Restoration Act of 1966. A significant portion of the pollution of Lake Michigan could be reduced by adequate grants to the municipalities which must manage increasingly larger sewage loads. The gap between promise and fulfillment should not be permitted to widen as the quality of Lake Michigan water deteriorates.

# # # # # # #

(Applause.)

MR. STEIN: Thank you, Mrs. O'Brien.

Any comments or questions?

If not, may we have Mrs. L. W. Bieker, of the Indiana Division of the American Association of University Women.

MRS. L. W. BIEKER
INDIANA DIVISION
AMERICAN ASSOCIATION OF UNIVERSITY WOMEN
MUNSTER, INDIANA

MRS. BIEKER: We appreciate the opportunity to make known our views on the issue of enforcing water quality standards in the Calumet area of Lake Michigan. The Indiana Division of the American Association of University Women supports measures that will increase protection of the public interest in the problem of pollution control and requests that there be no relaxing or extension of meeting those standards.

Local governments and industry have protested against what they have considered too much Federal

Government control during the 70 years of attempts by the national government to correct misuse of our waters. Much of the action by the Federal Government toward helping the public has been dissipated and fractionated spot patching. Nevertheless, the public has to depend upon that control for protection against misuse of our local and national resources. We have been glad to see Illinois and Indiana endeavor to cooperate in setting and enforcing standards that affect populations of both States but recognize already that the efforts have not gone far enough.

No resource seems so important as our water supply. Since the Chicago area is considered second in the country in its scarcity of water on the basis of per capita needs, we attach great importance not only to the legislation bearing on water quality and use but to the proper and equitable enforcement of the standards set for this area.

The reports on lake conditions since 1965, despite efforts by some industries to improve and alter their facilities for water treatment and use, indicate the folly in relaxing at all the requirements set. Since additional and larger industries have been permitted to be built along the lake shore and powerplants affecting the water supply and quality have grown in number and influence, it is obvious that increased destructive influences on the lake have stiffened the need for even firmer control in administering the law.

It is already much too late to consider lowering the standards or extending deadlines for enforcement. All over the world it is recognized that demands of industry completely overwhelm all efforts to keep pollution in check. The public has given up far too much already in losing its proper use of Lake Michigan. When have the economic benefits of careless and illegal use of our lake water supply been weighed against the cost of gradual homicide?

Thank you for whatever improvements you can influence this conference to make.

(Applause.)

MR. STEIN: Thank you very much, Mrs. Bieker.

Any comments or questions?

If not, we also have a statement of the Committee on Lake Michigan Pollution, which we will include in the record.

(Which said statement is as follows:)

STATEMENT OF THE COMMITTEE ON LAKE MICHIGAN POLLUTION
FOR
CALUMET ENFORCEMENT CONFERENCE
AUGUST 26, 1969

It is the presumption of this Committee that United States Steel Corporation (U.S. Steel) and Republic Steel Corporation (Republic Steel) will at this Conference restate their request for additional extensions of time to comply with the standards set by the Conferees. In the case of Republic Steel, the extension is to be December 31, 1970, and for U.S. Steel, November of 1971.

This Committee views with concern the inability or lack of motivation on the part of these two companies to meet the standards which their competitors and other heavy industries have met or will meet by the end of 1969. Of all of the polluters cited at the 1965 Conference, the two companies in question have not only not complied but have apparently failed to evidence a good faith effort to comply.

If all of the other cited polluting companies will have fully complied by the end of 1969, the unusual delays sought by U.S. Steel and Republic Steel should be granted only if the Conferees are satisfied that these entities are currently committed under contract to pay, or have paid, amounts to undertake the planning and construction to fully comply with the conference requirements within the extension period.

Secondly, if such extension periods are granted, that monetary *per diem* penalty provisions be established to go into effect if the polluting company does not fully comply at the end of the extended period. The imposition of such a device will provide the apparently needed incentive for full and prompt compliance.

It is not unfair for the Conferees to put the non-complying companies into a position of automatic and severe penalties should they, for any reason, fail to comply considering the gravity of the situation. They have enjoyed and are continuing to enjoy the benefit of full operation at profit in the face of acknowledged pollution of a natural resource in directly affecting the rights of the nation as a whole and directly affecting the right of millions of people residing in the Lake Michigan water basin.

The only remaining alternative remedy, an undoubtedly harsh one as it would affect the stockholders and employees of the non-complying company, is to require immediate and complete termination of the plant operations that are the source of pollution until the pollution abatement equipment and construction is completed and ready for full and effective operation.

Committee on Lake Michigan Pollution
2738 Woodbine
Evanston, Illinois 60201
August 24, 1969

MR. STEIN: And Congressman Edward J. Derwinski has asked that the record be kept open for a statement of his. Without objection, that will be done.

(Which said statement, when received, will be appended to the end of this transcript.)

MR. STEIN: At this point we will recess for ten minutes and then continue with the agenda.

(Recess)

MR. STEIN: Let's reconvene.

In order to move this along, we are going to try to give the other citizen groups who made themselves known in the registration this morning an opportunity for a statement here. And I hope in dealing with this that all citizens, other than official agencies and the industries, wishing to speak will have done so. I ask for your cooperation in trying to go ahead in an orderly fashion. As I pointed out, we are not here to cut anybody off. But I think that we should have short and succinct statements.

One thing that struck me in all the statements that we had this morning was they were short, to the point and hit specifics. If we have done nothing else in the years we have held conferences, I think we have more incisive and precise citizens' reports.

I do have a letter here from Mrs. Genevieve Capstaff that, without objection, I would like to put in the record.

(Which said letter is as follows:)

11141 South Bell Avenue
Chicago, Illinois 60643
August 6, 1969

Federal Water Pollution Control
219 South Dearborn
Chicago, Illinois

Gentlemen:

It is imperative that we do everything in our power to save Lake Michigan.

The dumping of oil and waste by the steel companies must be stopped. The use of DDT must cease.

Do all in your power to strengthen and enforce the laws to protect this beautiful and useful work of nature.

Sincerely,

(Mrs.) Genevieve Capstaff.

MR. STEIN: And now I would like to call on Lois C. Bishop of the Rainbow Neighbors.

Mrs. Bishop.

MRS. R. B. BISHOP, CHAIRMAN
ENVIRONMENTAL COMMITTEE
RAINBOW NEIGHBORS
CHICAGO, ILLINOIS

MRS. BISHOP: Good morning, Mr. Chairman, members of the conference, ladies and gentlemen.

My name is Lois C. Bishop. I am testifying today as the Chairman of the Environmental Committee of Rainbow Neighbors.

We are a neighborhood organization in the South Shore district of Chicago, adjoining Rainbow beach and Rainbow park, and located directly to the north of U. S. Steel's South Works. Our beach and park have been one of the most beautiful places in the city and are used and loved by the whole neighborhood. The beach and park are sorely needed as a recreational facility by a neighborhood whose population, particularly of children, is increasing steadily, and whose recreational facilities and park land are already considered deficient by planning groups, including the Department of Planning of the city of Chicago.

Only a few years ago one could not only swim in clear water, but could catch good game fish right off the piers. A sizable fishing industry was located on the lake also. The quality of the lake is deteriorating at an accelerating rate, and it will be a massive job to restore it to the clarity we once knew. We must not continue to pollute it besides.

We reject completely the contention of certain industries that they have any right to put any additives whatever into the lake. We further reject their contention that the rights of industry can ever be considered superior to the rights of the citizenry to enjoy their birthright of clear air and water in their own neighborhood.

Consequently, we feel that any chemical additives or heated water used as cooling water, or for any other purpose, should not be permitted.

We support the Metropolitan Sanitary District in its suit to force U.S. Steel to comply with the present deadlines.

We feel very strongly that the companies who have not met the present deadlines should be required to do so, and that heavy penalties should be assessed against them for non-compliance, both past and present.

We also feel that no further extension should be granted to these companies.

We understand that two companies, Interlake and Wisconsin, have substantially met the deadlines, and it is grossly unfair to them to grant an economic advantage to U. S. Steel and Republic Steel because they have not complied. Both the non-complying companies have been persistent and chronic offenders in air pollution also, leading us to suspect that their attitude is hardly one of public service, despite their advertisements.

We do not see any reason whatever why they should be treated any differently than a company that has been guilty of fraud or theft or any other sort of criminal activity. In fact since it is our lives and our irreplaceable resources that are being destroyed by these companies, we feel that they should be treated more severely than ordinary criminals.

Thank you.

(Applause.)

MR. STEIN: Thank you, Mrs. Bishop.

Any comments or questions?

Again let me make one statement just for the record and edification of the people here. The procedure that we are under here today, that is the Federal conference procedure, is a civil procedure, not a crimina procedure. This question was carefully considered by the Congress, and the Congress decided we could make better progress in this field if we would do this under a civil procedure.

May we call on Mr. Gunnar A. Peterson of the Open Lands Project.

Mr. Peterson.

GUNNAR A. PETERSON, EXECUTIVE DIRECTOR
OPEN LANDS PROJECT
53 W. JACKSON BOULEVARD, CHICAGO, ILLINOIS

MR. PETERSON: Mr. Chairman and members of the Calumet area enforcement conference, I am Gunnar Peterson, Executive Director of the Open Lands Project with offices at 53 West Jackson. The Open Lands Project is a non-profit, privately supported organization dedicated to the preservation of open space and man's natural environment.

I am here today to urge you to take whatever measures are within your power to preserve Lake Michigan as a multi-purpose resource for open space, recreation and natural beauty as well as a source of water for municipal and industrial purposes.

As a minimum, you must press for maintenance of the water quality standards set by this conference for industries within its jurisdiction. You must insist that the standards be met with the dispatch necessary to preserve the health of the lake, not at some future time convenient for industries and other polluters who frag--flagrantly--and I almost said fragrantly, and I think that would be a good slip (laughter)--who flagrantly misuse this public resource.

The inordinate amount of time required by U. S. Steel to design facilities and acquire materials, as detailed in their May 1969 progress report, is unjustifiable. Their future intentions must be questioned in light of the fact that so little work had been started at that point, six months after it was supposed to have been completed.

G. A. Peterson

In view of the report to this conference last December 11, by Robert Bowden of the Calumet Surveillance Unit of the Lake Michigan Basin Office, no industry, including these steel mills, or other polluters, such as the Great Lakes Naval Training Station, one of our own governmental operations, should be allowed to delay further the meeting of water quality standards and to do so without penalty. In the technical words of the report, the water at every intake for the cities of East Chicago, Hammond and Gary and the Dunne Crib for Chicago, which supplies our own drinking water, failed to meet several important criteria, including that for "threshold odors."

In plain words, it was so polluted it stank. This is the water that residents of these cities must drink, swim in and hold their noses while looking at on the shore because of the pollution this conference has not prevented in its pollution abatement program begun almost five years ago. On behalf of the public that suffers the greatest consequence of this failure, we ask that the conference press forward in causing industry to remove all contaminants before water taken from the lake is returned to the lake. Early deadlines for meeting water quality standards must be maintained, with severe consequences to the violators when they are not.

Not only the lake, but the Grand Calumet-Indiana Harbor Canal system and the Calumet River above and below the O'Brien Locks must remain within the jurisdiction of the conference through the agencies of which it is comprised. According to the surveillance report, industrial pollution had not been reduced in the Grand Calumet-Indiana Harbor Canal system and fecal pollution was reduced only upstream, with the inevitable result that the water quality had deteriorated further since 1965. The Little Calumet did not meet criteria, but had improved slightly in spite of severe pollution from sewer overflows.

We question whether pollution has indeed been dealt with when the method was simply moving it to another location rather than by removal by the responsible industry at the source.

The Calumet River between the O'Brien Lock and the lake must remain within the conference jurisdiction because of the high level of pollution which flows toward the lake whenever the wind is from the south and evidently under other conditions as well. Mr. Vaughan of the Department of Water of the city of Chicago reported to the conference last February that in 29 out of 47 weekly observations the flow was toward the lake in the river mouth at the 92nd Street Bridge.

Finally, this conference must not only prohibit discharge of industrial and sewage wastes into the lake that would violate present water quality standards, it must review its criteria in the light of the need to reverse the eutrophication or death of the lake, not just delay it slightly, perhaps.

Dependence on assimilation and dilution in large mixing zones is not adequate. Standards should be met at the outfalls from the sources, not some distance away, such as at the intakes, where responsibility for specific contaminations cannot be assigned.

In its review, it is imperative that the conference add to its water quality criteria by setting standards for heat that will avoid thermal pollution.

With the ample scientific evidence of the effects of heat on accelerating growth of algae and release of oxygen, cooling waters containing more heat when discharged into the lake than when withdrawn cannot be considered free of pollution. Actually, not only heat but chemicals to inhibit rust and prevent growth of fungi are added deliberately to cooling waters, which inadvertently pick up other contaminants in the pipes through which they circulate in many industrial systems. So-called recycling systems that do not include removal of all such substances as well as the added heat should not be considered effective antipollution measures.

In conclusion, our views may be summed up as a belief that the purpose of this conference ought to be to preserve the lake from as much pollution as possible, not to make use of it to dispose of as much waste as possible. Only then will we and all others who live on its shores be able to drink it, swim in it and not have to smell it.

Only then will the equally important purposes of providing open space, recreation and clean water for people and industry be served. U. S. and Republic Steel must join in the effort with all haste to compensate for the time already lost and without further delay.

Thank you.

(Applause.)

MR. STEIN: Thank you, Mr. Peterson.

Any comments or questions?

If not, at this point we will call on Mr. Poston for the Federal surveillance report.

Mr. Poston.

FEDERAL PRESENTATION

MR. POSTON: I am asking Mr. Carlysle Pemberton to make the report of the Technical Committee, which has access to all of the data on quality in the area.

Mr. Pemberton.

CARLYSLE PEMBERTON, JR., DIRECTOR
OFFICE OF TECHNICAL PROGRAMS
U. S. DEPARTMENT OF THE INTERIOR, FWPCA
GREAT LAKES REGIONAL OFFICE, CHICAGO, ILLINOIS

MR. PEMBERTON: Mr. Chairman, conferees and ladies and gentlemen.

I am Carlysle Pemberton, Director of Technical Programs in the Federal Water Pollution Control Administration, Great Lakes Regional Office. I am presenting a progress report for the Technical Committee which was appointed after the last session. I will read from the report.

The Technical Committee was established in accordance with the desire of the conferees expressed at the third progress evaluation meeting held in December 1968 and January 1969. The Committee was requested to assess the results obtained thus far by conference actions, and to determine whether additional actions by the conferees will be required to achieve satisfactory water quality in the conference area. Present Committee members are:

H. W. Poston, Chairman - Federal Water Pollution Control Administration.

B. T. Lynam - Metropolitan Sanitary District of Greater Chicago.

R. S. Nelle - Illinois Sanitary Water Board.

O. H. Hert - Indiana Stream Pollution Control Board.

As I said, I am the Director of the Technical Programs Office of the Great Lakes Region, which has provided the major Federal technical input to the Committee, and I am presenting the report for the Committee.

The Committee has held eight meetings at approximately monthly intervals, has agreed on a course of action, and has pursued that course as rapidly as possible. Specific tasks of the Committee are:

(1) Assemble and evaluate all existing data on quality of receiving waters and of municipal and industrial effluents.

(2) Estimate future quality of receiving waters, using the waste loads from industrial and

municipal waste treatment facilities as prescribed by the local regulatory agencies.

(3) Determine whether further control measures will be needed to achieve satisfactory water quality in the Conference area, and make recommendations to the conferees.

Upon completion of the evaluation of existing data, the Committee will furnish the conferees an Interim Report. At the present time, the data evaluation is in rough draft stage and this statement will present conclusions on water quality changes over the past four years for Grand Calumet River, Lake Michigan, Little Calumet River and Wolf Lake. Data for Calumet River are being analyzed. In general, it can be said that the waters of the conference area are far from satisfactory and violate the conference criteria at many locations. There have been improvements for some parameters at some sampling stations. These improvements usually can be related to pollution abatement actions taken by municipalities and industries in the area. Similarly, lack of improvement in water quality has also sometimes resulted from changes in waste handling procedures.

C. Pemberton, Jr.

Major improvements in water quality cannot be expected until adequate treatment plants at five major steel plants are completed. Pollution from combined sewers, surface runoff, and inadequate municipal waste treatment must be controlled before satisfactory water quality can be achieved. Although all municipalities provide secondary treatment and chlorination, existing treatment appears to be inadequate in some instances and will require further improvement.

I will now go through the sampling stations, and Mr. Degutis will point them out on the map.

Station 1 - Grand Calumet River at Pennsylvania Railroad Bridge.

Over the past four years, there has been general improvement in total coliforms, fecal coliforms, fecal streptococci, dissolved oxygen (DO), biochemical oxygen demand (BOD), chemical oxygen demand (COD), the nitrogen series, methylene blue active substances (MBAS) or detergents, phenols and oils. This is moderate improvement. There has been significant improvement in sulfate and pH, hydrogen-ion concentration, which is an indication of acidity. In spite of the improvements noted, however, water quality at this station remains unsatisfactory.

Station 2 - Indiana Harbor Canal at 151st Street.

There have been no significant changes in the unsatisfactory water quality over the past four years Slight improvements have occurred in DO, sulfate and ammonia nitrogen.

Station 3 - Indiana Harbor Canal at Dickey Road.

There has been very little change in the unsatisfactory water quality in the past four years. Phenols show a slight improvement. Dissolved oxygen has decreased at this station.

Station 4 - Indiana Harbor at Mouth of Canal.

Station 6 - Indiana Harbor at Inner Harbor Light.

There have been significant reductions in levels of sulfate and phenol at both stations. Moderate improvement has occurred at Station 6 in pH, organic nitrogen, total iron, cyanide, suspended solids and turbidity. There has been little change in other parameters measured. The overall water quality remains unsatisfactory.

Station 7 - Grand Calumet River at Indiana Belt Railroad Bridge.

When all parameters are considered, more show a tendency toward lowering of the water quality here than show improvement. Water quality at this station remains unsatisfactory.

Station 8 - Little Calumet River at Wentworth Avenue.

Total coliform counts have increased, although fecal coliform and fecal streptococci are not significantly changed.

Some improvement is indicated for phosphate and phenols.

Lower dissolved oxygen and higher ammonia levels indicate further degradation in the already degraded conditions.

Other parameters are unchanged.

Station 9 - Wolf Lake at State Line.
Station 10 - Wolf Lake Outlet at Carondolet Avenue.

Total phosphorus has increased at both

stations, with concentrations at State Line about double those at the Outlet.

Other parameters showed no significant changes.

Water quality of Wolf Lake remains satisfactory.

Station 11 - Calumet Harbor at Mouth of Calumet River.

Station 13 - Calumet Harbor.

Total coliform counts have decreased at Station 11, while remaining steady at Station 13.

Ammonia nitrogen levels have declined at both stations.

Phenols show an improvement at both stations.

Total phosphorus declined at Station 11, but shows no significant change at Station 13.

Suspended solids have decreased at Station 11, and remain about the same at Station 13.

Turbidity and total iron concentrations have shown significant improvement at Station 11, and remain about the same at Station 13.

Sulfates have decreased at both stations.

The overall water quality at these stations has improved, but remains unsatisfactory.

Station 14 - Gary-West Water Plant Intake.
Station 15 - East Chicago Water Plant Intake.
Station 16 - Hammond Water Plant Intake.
Station 17 - Chicago So. Dist. Water Plant Intake.

An analysis was made of the parameters which violated the criteria during the period of sampling August 1966 through March 1969. The evaluation of trends in water quality is presented in the attached table, which indicates improvement in some parameters, no significant change in others, and a decrease in quality at Stations 14 and 17 for the threshold odor parameter. Although an overall improvement is indicated, water quality remains unsatisfactory because of the many criteria violations.

Beaches.

The beach sampling program over the last four years has indicated an overall improvement in water quality as indicated by the reduced frequency of violations of the bacterial criteria. However, it was noted that after July 15 of this year, total coliform counts increased sharply at Rainbow Beach and the Calumet Harbor Beaches. The high coliform counts were not accompanied by high fecal streptococci counts.

Summary.

In general, water quality in the conference area is still unsatisfactory, and violates the conference criteria at many locations.

The improvements noted herein are apparent trends based on an evaluation of a relatively short period of surveillance.

Many of the indicated improvements in water quality can be related to improvements in waste control instituted by industries or municipalities. Likewise, lack of improvement can sometimes be related to changes in waste handling procedures.

Major improvements in water quality will not be evident until adequate treatment facilities at the steel plants are completed.

In order to achieve satisfactory water quality in the conference area, further measures will be needed. These include, but may not be limited to, control of pollution from combined sewers, surface runoff, and inadequately treated municipal wastes.

Thank you.

(The following tables were submitted by Mr. Pemberton:)

SUMMARY OF EVALUATION OF TRENDS IN WATER QUALITY FOR PARAMETERS WHICH VIOLATED WATER QUALITY CRITERIA (AUGUST 1966 THROUGH MARCH 1969)

(Criteria for Which Numerical Values were Specified)

Parameter	Apparent Increase in Water Quality	Apparent Decrease in Water Quality	No Apparent Change in Water Quality
STATION 14 GARY-WEST WATER PLANT INTAKE			
Coliform bact., MPN/100 ml	X		
Fecal strep., No./100 ml	X		
True color units	X		
Threshold odor units		X	
pH units	X		
Dissolved oxygen, % sat.			X
Ammonia nitrogen			X
Total nitrogen	X		
MBAS			X
Chlorides			X
Phenol			X
Total phosphate			X
Filterable residue			X
STATION 15 EAST CHICAGO WATER PLANT INTAKE			
Coliform bact., MPN/100 ml	X		
Fecal strep., No./100 ml	X		
True color units	X		
Threshold odor units	X		
pH units	X		
Dissolved oxygen, % sat.			X
Ammonia nitrogen	X		
Cyanides			X
Phenol	X		
Total phosphate			X

SUMMARY OF EVALUATION OF TRENDS IN WATER QUALITY FOR PARAMETERS WHICH VIOLATED WATER QUALITY CRITERIA (AUGUST 1966 THROUGH MARCH 1969)

(Criteria for Which Numerical Values were Specified)

Parameter	Apparent Increase in Water Quality	Apparent Decrease in Water Quality	No Apparent Change in Water Quality
STATION 16 HAMMOND WATER PLANT INTAKE			
Coliform bact., MPN/100 ml	X		
Fecal strep., No./100 ml	X		
True color units	X		
Threshold odor units	X		
pH units	X		
Dissolved oxygen, % sat.			X
Ammonia nitrogen			X
MBAS			X
Phenol			X
Total phosphate			X
Filterable residue			X
STATION 17 CHICAGO SOUTH WATER PLANT INTAKE			
Fecal strep., No./100 ml	X		
Threshold odor units		X	
pH units	X		
Dissolved oxygen, % sat.			X
Ammonia nitrogen	X		
Total nitrogen	X		
Chlorides	X		
Phenol			X
Total phosphate			X
Filterable residue			X

MR. STEIN: Thank you, Mr. Pemberton.

Are there any comments or questions?

MR. POSTON: For clarification, I would like to ask Mr. Pemberton whether the Committee report shows or will show the quality of our streams to be expected at the completion of construction of the plants that are now under construction?

MR. PEMBERTON: Yes, sir. Our interim report which I spoke of will present in detail the evaluations of the existing data which I have just summarized, and we have set a time schedule to provide a final report within six months after the interim report and our final report would predict the water quality in the area using the waste loadings as prescribed by the regulatory agency, that is taking into account the treatment plants as they will discharge after they are completed. This would be the Committee's final report. This is not an easy job, but we think we can approximate it.

MR. STEIN: Mr. Poole.

MR. POOLE: I would like to request, Mr. Chairman, that the next time we get a report at a reconvening of this conference that it be a report of the Committee rather than Mr. Pemberton's analysis. You know, you can draw various conclusions from groups of statistics, depending upon how you look at them, and I would just prefer to have Committee reports rather than a single man's analysis.

MR. STEIN: Right. I had noted that, but I refer to the first page of the report. Maybe we should get clarification.

It says that Mr. Pemberton is presenting this report for the Committee.

MR. PEMBERTON: Yes, sir.

MR. STEIN: Are you speaking for the whole Committee, Mr. Pemberton?

MR. PEMBERTON: Yes, sir. The Committee met last Friday, roughed out this report and it was prepared in final form yesterday. The full Committee hasn't seen the final version. However, three of the four members of the Committee have seen the final version and to this date I haven't had any complaints.

But Mr. Poole, as a member of the Committee, being in Indianapolis hadn't had a chance to see the final version. However, I discussed it over the phone with him Monday of this week, I believe.

MR. STEIN: Well, I do think that this report that we are getting here is probably going to be a key to the conclusion of the case we have on the lower end of Lake Michigan, and I think we can't emphasize that too strongly.

Now, as I see this, since the focus in the future is going to be on the water quality we achieve, because that is what we are looking for, and not necessarily on the plants we build, it would be advisable to have these reports pretty well reviewed in advance of the conference if we can. In the future, the group should look at these reports and it might be well to rotate the person on the Committee who gives the report. We can let someone from the Sanitary District or Illinois or Indiana give this report for the Committee in the future at sometime, as the Federal conferee did in the previous meeting.

Let me try to resolve this, because I think this is probably a very key point at this stage of the proceedings. You say you are going to get an interim report and a final report with recommendations. When can we expect that final report?

MR. PEMBERTON: Well, we expect to complete the interim report within the next 2 months and the final report, as I said, was scheduled for 6 months after the interim report. So that would be 8 months from now.

MR. STEIN: This, it seems to me, may be the problem. One of your charges is to determine where control measures will be needed first to achieve satisfactory water quality in the conference area and to make recommendations to the conferees. It also seems to me from various statements which are pretty general in your report that you would think that possibly, even if we had completed all the works that the conferees had agreed on, water quality standards would not really be met in all these cases.

If this is the case, I believe we must get these recommendations to the conferees as soon as possible. Otherwise, there is no point to all this, whatever you may say about treatment works or meeting deadlines or not meeting deadlines if all these are done and the water quality does not meet the requirements which we have set forth. The conferees, it seems to me, need that information as early as possible. Maybe it is too long now. I will give you a personal opinion. With all the work that we had done up to now, and there has been considerable work that has been done successfully--most of the petroleum and oil companies have put in works; many of the steel companies have put in remedial facilities; certainly the municipalities have moved ahead--it certainly appeared to me that we would see a better quality of water or improvement in water quality than evidently is indicated by your report. I think again we should try to get this as rapidly as possible and not wait until these steel plants have completed their works to find out that maybe we are not getting the water quality we need.

Let me ask you one question, Mr. Pemberton, after all that. Do you think it would be possible to get recommendations for consideration by the conferees so that we could meet again in 6 months to do that? This would mean that we would need those recommendations perhaps in 5 months for the conferees, because we just have to get at this aspect of the case. No one is going to be happy if after the works are completed we are going to keep getting these dismal reports that water quality remains the same, slightly improved or degraded.

MR. PEMBERTON: Well, we can try. The Committee is handicapped by all Committee members having a heavy workload and it has been difficult. But if this is what the conferees need, why, we certainly can try.

MR. STEIN: I am going to propose that when we get into the discussion, because it seems to me that this is going to be the test of whether we have done the job or not, not whether we have built the plants or built them on time, but whether we have improved the water quality. And unless we do that, we have failed. And we certainly want to have a program that is going to give us this kind of water quality.

Are there any other comments or questions?

MR. POSTON: I think I would like to remind you, Mr. Chairman, that this Committee was formed after our last meeting and it was formed because of the problem that we had had in finding that we were not getting the improvement that we had anticipated. And certainly I am in favor of moving this faster if it is possible.

This is a tough job that has been taken on.

MR. STEIN: I recognize that and this is the problem we have in all complex areas. When we clean up a mass of pollution we find that we have masked other problems that really require getting at, and this is what may be happening here.

MR. PEMBERTON: I can point out, Mr. Chairman, that we have recognized three individual problems here and made what amounts to a recommendation to the conferees that these three things are going to have to be done and we don't yet know what else is going to have to be done in order to get satisfactory water quality. In other words, water that meets the criteria at all times.

MR. STEIN: Again, sir, I think, as you well know, if we are going to deal with a combined sewer problem or something such as inadequately treated municipal wastes, we can always talk about those in general, but unless we have chapter and verse and recommendations, we are not going to get very far.

MR. PEMBERTON: The specific recommendations are included in our interim report. As I said, it is in draft stage and I summarized it very briefly. But specific plants are named in there by the Committee members who have prepared various portions of it.

MR. STEIN: If we are going to deal particularly with inadequately treated municipal wastes and if you are going to get a report in 2 months, I think whether we meet or not, it might be a short meeting of the conferees, this information certainly should be acted upon so we can get moving and not wait 6 months or 8 months until the final report comes out or else we are never going to achieve the objectives.

MR. PEMBERTON: This will be covered in this interim report.

MR. STEIN: All right. I think we will all look forward to looking at that and seeing if we have any specific recommendations on which we can move.

Again for the people here, I think that this kind of box score that you have just got from this Technical Committee is going to be the indicator which tells us whether we have been successful in the program or not, and I would submit that this is the thing to watch from here on out.

Are there any other comments or questions?

If not, thank you very much, Mr. Pemberton

At this point we would like to call on Mr. Vinton Bacon of the Sanitary District.

Mr. Bacon.

VINTON W. BACON, GENERAL SUPERINTENDENT
METROPOLITAN SANITARY DISTRICT OF
GREATER CHICAGO, CHICAGO, ILLINOIS

MR. BACON: Mr. Chairman, conferees and ladies and gentlemen. I have a prepared statement in two parts, one which I will read a little later which I think will give you great encouragement as to what is going on in this area, and the second part which will be given by Mr. Bart Lynam of our office on the specific details of individual industries which we have been requested to report upon in addition to the two main subject industries, Republic Steel and U. S. Steel.

Before reading this statement, though, and showing you some slides, some questions have been raised this morning that deserve and need to be answered, and I will attempt to answer them.

Before doing that, though, I would like to point out to the audience and the conferees that we have had, I think, the finest, most productive and cooperative coordination and cooperation with the State Sanitary Water Board and its chief, Mr. Klassen, the Regional Office of the Federal Water Pollution Control Administration and its chief, Mr. Poston. Because of the remoteness, we have not had quite such close contact with Mr. Blucher Poole, but the association we think has been pleasant, and I think I am going to show you, at least as far as some of the stations are concerned--(We do not need the lights out yet, gentlemen; I will let you know.) --has been productive, as I am going to show you later on on these slides.

We have been as far away as the telephone. We have immediately reported to one another, they to us and we to them, what would be transpiring in the future even if it was contemplated at the moment. So I think there has been nothing but the finest and I think productive cooperation among the agencies and this conference.

The statement was made this morning by

the Honorable Carl L. Klein that we did not appear at the December 11-12 conference submitting testimony about the Calumet region conference. This is Volume 1 of the transcript. On page 62 of the first day of the conference is a statement by myself, the Superintendent of the District, extending on some innumerable pages. Because we were not prepared at that first day to answer all the questions, we asked for an audience the second day. This conference, being a fact seeking group, granted that second day, and on page 461 of the conference and for many pages thereafter is a further statement by the Metropolitan Sanitary District. And at that time we submitted the construction schedules of the various industries that we had at that particular moment and in particular we submitted the bar graphs or what we call the CPM, the Critical Path Method Network, by which the U. S. Steel and the other companies would be constructing.

Throughout all of this, the President of the Sanitary District, President Egan, I don't think has ever missed a meeting of these conferences. He has participated in the discussions and he has participated in various significant motions before the conference, as you will see on page 725* when the conferees were discussing their actions. The question is asked by Chairman Stein, they are discussing what to do about the various industries:

"MR. STEIN: Republic Steel Corporation?

"MR. EGAN: I am going to renew my motion, Mr. Chairman, that this be referred to the Secretary of the Interior for decision and action."

Then back on page 732,* after long discussion of the intermediate points, the point is made by Mr. Poole:

"I think the practical effect of this, Mr. Chairman"--and now they are talking about U. S. Steel--"is that we have done the same thing with the South Works that we did with Republic Steel, haven't we, that we have handed it to the Secretary?"

And there was unanimous agreement to that, that they had handed it to the Secretary.

So to correct the record, there has been very intimate contact among the agencies and official participation in these conferences in connection with these two cases that are before us today.

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* Second Session, Dec. 11-12, 1968, Jan. 29, 1969, Calumet Proceeding.

Further the question was raised why since about late November or December of 1968 the plans of U.S. Steel were not made available--the construction plans and dates were not made available to the other agencies. The answer to that is very clear and convincing. U. S. Steel submitted to us five different sets of plans and timetables to accomplish the results and on the first four we found them unsatisfactory. We had very candid conversations with the company. We said, "You've got fat in your timetable; we want it out." And as a result of meetings that extended from December of 1968, there was an intermediate meeting, number two was on May 19, 1969, April 7, 1969, June 2, and at the June 2 meeting we finally arrived at the point where they had a schedule pointing toward on or before December 31, 1970, that we as staff found acceptable to the extent that we could submit it to the Board of Trustees and to the other agencies involved.

So the reason that we did not go to any other agency in that time period is because we were not satisfied ourselves, and we are the first agency concerned with this enforcement. Therefore, we rejected all of them up until the date of June 2, in which we then had something we could submit to the Board, in our opinion, and that we could justify and support.

And in this process, in an effort to keep the communication lines as busy as possible and as effective, the Honorable Carl Klein and I have been in telephone conversations frequently. Immediately after that June meeting he and I talked about this case, U.S. Steel, and under date of July 21, 1969, I furnished him a personal letter, I handed it to him a few days later when he and I had lunch together, in which we set forth the projected stipulation with U. S. Steel and the latest CPM, Critical Path Method Network, that we found satisfactory to the Sanitary District personnel and that was made available to him.

So I believe, just so that you do not go away from here with the idea that we haven't participated and we haven't communicated, I could go on at great length on both U. S. Steel and Republic Steel from the record. In the case of Republic Steel, their plans came to us on December 6, 1968, with the timetable and all. We sent it with this enforcement. Therefore, we rejected all of them up until the date of June 2, in which we then had something we could submit to the Board, in our opinion, and that we could justify and support.

And in this process, in an effort to keep the communication lines as busy as possible and as effective, the Honorable Carl Klein and I have been in telephone conversations frequently. Immediately after that June meeting he and I talked about this case, U.S. Steel, and under date of July 21, 1969, I furnished him a personal letter, I handed it to him a few days later when he and I had lunch together, in which we set forth the projected stipulation with U. S. Steel and the latest CPM, Critical Path Method Network, that we found satisfactory to the Sanitary District personnel and that was made available to him.

So I believe, just so that you do not go away from here with the idea that we haven't participated and we haven't communicated, I could go on at great length on both U. S. Steel and Republic Steel from the record. In the case of Republic Steel, their plans came to us on December 6, 1968, with the timetable and all. We sent it to the State Sanitary Water Board. The State Sanitary Water Board said, "We will look at this projected timetable which would cause completion by December 31, 1970, when the due date comes, namely September 30, 1969." And so the State Sanitary Water Board will be looking at that schedule within probably a month.

And at the time that this was made available to the State Sanitary Water Board it was also made available to the U. S. Department of the Interior. I don't have the records here so that I can be precise on the date, but it was ordered by the Board of Trustees.

I think that the matter of the referral of these two cases to the Department of the Interior was an expression by this conference that the cases are complicated, there do seem to be conflicting criteria, and there has seemed from time to time to be jurisdictional misunderstandings. That is the precise reason, among others, I am sure, that these cases went to the Department of the Interior in January of this year.

But I would like to refresh your memories on another important act that the Sanitary District Board of Trustees took in the latter part of 1967. At that time the Board passed a nine-point program in connection with water quality improvement and one of the points was to ask the Department of the Interior to reconvene this particular conference for the specific purpose of clarifying the criteria and clarifying the lines of jurisdiction. So again I submit that any portrayal that there has not been the best of cooperation and communication would tend to mislead you.

I would like, Mr. Chairman, to submit into the record two letters that were prepared for this conference from our law department to me, and we have extra copies that you may pass out right now, Mr. Rothenberg. One is giving the summary of the case of the U. S. Steel Corporation right up to the moment. It is about two pages long. And the second letter is likewise for the Republic Steel Corporation,under the title of Pollution Abatement,telling where we stand now, and as I just stated, action on the question of extension to the State Sanitary Water Board before September 30th.

MR. STEIN: These will be included in the record as if read,without objection.

(Which said letters are as follows:)

THE
METROPOLITAN SANITARY DISTRICT
OF GREATER CHICAGO
100 EAST ERIE ST., CHICAGO, ILLINOIS 60611...SUPERIOR 7-8900

August 25, 1969

Mr. Vinton W. Bacon,
General Superintendent
Office

In Re: United States Steel Corporation
Pollution Abatement

Dear Mr. Bacon:

On October 26, 1967, the Metropolitan Sanitary District of Greater Chicago filed suit in the Circuit Court of Cook County, Illinois, against United States Steel Corporation, Case No. 67 CH 5772, for the purpose of obtaining an injunction restraining United States Steel Corporation from polluting the waters of Lake Michigan, which is a water supply for the City of Chicago and other cities and villages in the State of Illinois.

The suit was filed pursuant to Statutes of the State of Illinois, and was assigned to the Honorable George N. Leighton, Judge of the Circuit Court of Cook County, Chancery Division.

After numerous hearings, on March 4, 1968, the Metropolitan Sanitary District, in the same case, filed a supplemental petition charging United States Steel Corporation, specifically, with discharging great amounts of oil into Lake Michigan. The Court, after hearing evidence presented by both parties, did on March 22, 1968, enter an order finding that it had authority to hear the matter and issued an order restraining and enjoining United States Steel Corporation from polluting Lake Michigan by discharging any oil or oily substances into the waters of Lake Michigan.

On the same day, United States Steel Corporation appealed the order to the Appellate Court.

The Illinois Supreme Court, on its own motion, transferred the case from the Appellate Court to the Supreme Court where oral arguments were heard on September 25, 1968.

On November 22, 1968, the Supreme Court entered an order affirming Judge Leighton's decision. The company thereafter asked for a rehearing which was denied on January 28, 1969.

Since that time, the District has been diligently preparing for trial of all issues involved by gathering evidence and consulting with experts.

Also, during the interim period, there have been meetings between The Metropolitan Sanitary District of Greater Chicago and the United States Steel Corporation, for the purpose of resolving this matter.

The company has presented plans with a time schedule in which it proposes to complete the necessary facilities to meet the requirements of the District and State Sanitary Water Board by December 31, 1970.

A proposed stipulation has been prepared by counsel for the respective parties. This provides, among other things, United States Steel Corporation to complete construction and have their facilities operational by December 31, 1970; and that the Court would retain jurisdiction for the enforcement of an interim order entered pursuant to the stipulation and the enforcement of any other order heretofore entered in the case.

The Board was requested to approve the settlement stipulation. It decided that it would not approve same. It directed that a copy of the stipulation be forwarded to the Sanitary Water Board with a request for the Sanitary Water Board to indicate, in writing, its approval and upon receipt thereof, the District would give this matter its further consideration and use the reply of the Sanitary Water Board for guidance.

As of this date, the State Sanitary Water Board has not issued its written approval.

Respectfully submitted,

Allen S Lavin

Allen S. Lavin, Attorney.

ASL:PR:bmg

Prepared by:

Phillip Rothenberg

Phillip Rothenberg,
Senior Assistant Attorney

THE
METROPOLITAN SANITARY DISTRICT
OF GREATER CHICAGO
100 EAST ERIE ST., CHICAGO, ILLINOIS 60611...SUPERIOR 7-8900

August 25, 1969

Mr. Vinton W. Bacon
General Superintendent
Office

Re: Republic Steel Corporation
Pollution Abatement

Dear Sir:

Conciliation negotiation proceedings were commenced about November 30, 1967 regarding discharges by Republic into the Calumet River from several water outfalls in violation of the 1946 Ordinance.

Show Cause proceedings against Republic commenced January 11, 1968 and were continued from time to time. On May 8, 1968, the hearings were recessed to give Republic time to submit a program and schedule for construction of water pollution control facilities at its Chicago plant.

The company indicated that it engaged the services of a consultant firm in September, 1966 to design waste treatment facilities.

Republic submitted plans June 27, 1968 for the design and construction of three (3) major waste treatment plants at an estimated cost of $6,000,000. The first completion date presented was September 1, 1972. Consultations with the Sanitary District cut the completion date to December 31, 1970.

The company represented that it is impossible to complete its construction program by September 30, 1969.

The Sanitary District contends that it has no power to extend the compliance date beyond September 30, 1969.

The Sanitary Water Board indicated to the company that the Board would not consider an extension beyond the September 30, 1969 date unless the request for extension came through the Sanitary District.

The Board of Trustees, on February 13, 1969, ordered Republic:

1. To proceed expeditiously with the construction program submitted;
2. To submit bi-monthly written reports indicating its progress; and
3. Request of Republic for an extension of time be submitted to the Sanitary Water Board.

In the event the Sanitary Water Board did not grant the extension requested by September 30, 1969, the Attorney was directed to take such action as necessary to enforce compliance with applicable ordinances and statutes.

The President of the Board of Trustees was directed to transmit a copy of the Stipulation, a copy of the Order of the Board of Trustees, and Republic's construction program, to the Federal Water Pollution Control Administration for its information.

The Sanitary Water Board subsequently indicated that if the company expeditiously proceeded with its construction program, consideration of the request for extension would be given by September 30, 1969.

Republic is making periodic reports to the District. Every indication is that the work is proceeding as outlined.

The decision of the Sanitary Water Board is being awaited.

Respectfully submitted,

Allen S Lavin
SBB

Allen S. Lavin,
Attorney.

Prepared by:

Julius H. Grubman
Principal Assistant Atty.

ASL:JHG:sg

MR. BACON: These are available to anyone in the audience or the press. I don't think we have a great number of copies now. But Mr. Rothenberg,here are the originals in case they want to make copies.

And now if I can get to the prepared statement. May we have the slides.

At Station 11, which is at the mouth of the Calumet River, of the twenty-six parameters studied during 1968, sixteen were reduced from 1966 and 1967 concentrations, four remained the same, and six could not be compared due to lack of data. Therefore, for comparison purposes, sixteen out of twenty measurable parameters have shown improvement.

For your orientation, Station No. 11 is located at the mouth of the Calumet River immediately adjacent to the north pierhead light.

Station No. 13 is located mid-harbor, approximately 3,500 feet from the mouth of the river.

The stations are not designated as control points in either the Two-State Conference Standards or State of Illinois standards. Numerical values for contaminent concentrations are the same for both sets of criteria. What we are trying to say here, we are in closer to the sources of pollution than if we availed ourselves of the two-State conference point, which is at the Hammond water intake, or the State of Illinois point, which is at the breakwater at the harbor.

The appearance of water in the vicinity of Station No. 11 has recently improved, due in part to the closing of United States Steel - Outfall No. 10 in August 1968. The mouth of the Calumet River (Station No. 11) reflects water quality improvements in both the river and Calumet Harbor.

At Station No. 11, fecal coliform shows a reduction from 520 per 100 ml in 1966, to 150 in 1967, and 111 in 1968. (Figure 2.) Bacterial quality at Station No. 11 has improved at a steady rate. During 1968, the total coliform criteria was not violated at either station. Average values for total coliform fecal streptococci and fecal coliform have decreased significantly in each of the past three years.

By the way, I am using the same figures that Mr. Pemberton submitted, only we are emphasizing Station 11, which we consider the key and most important.

V. W. Bacon

Total phosphorus shows a reduction from 0.059 milligrams per liter in 1966 to 0.048 in 1967, to 0.035 in 1968. (Figure 3.) Total phosphorus has been steadily decreasing, and is approaching criteria limits. In other words, we are acknowledging that we are not there yet, even in spite of this improvement.

Total iron shows a reduction from 7.7 milligrams per liter in 1966, to 7.2 in 1967, to 3.0 in 1968. (Figure 4.) Total iron shows a reduction of more than 50 percent in 1968 from previous concentrations reported in 1966-1967.

Suspended solids show a reduction from 35 milligrams per liter in 1966, to 32 in 1967, to 20.5 in 1968. (Figure 5.) There is no criterion for suspended solids; however, suspended solids continued to decrease in 1968.

Turbidity, the most dramatic of all, shows a reduction from 35 Jackson candle units in 1966, to 11 in 1967, to 3.6 in 1968. (Figure 6.) Turbidity continued to improve,as this chart shows, although the parameter continues in violation. In other words, we have some distance to go yet.

Total coliform fecal streptococci, sulfate, ammonia nitrogen, and phenol also showed significant reduction between 1966 and 1968.

It is evident, therefore, that measurable and visible progress has been made in reducing industrial pollution at this location. However, full compliance will not be achieved prior to completion of control projects presently under construction.

The number of samples each year was sufficient to give validity to the encouraging progress, being:

In 1966 there were 51 samples contributing to the record that you saw on the slide.

In 1967, 44 samples.

And in 1968, 38 samples.

We are never satisfied with the number of samples that we have, because we would like to take more; but we all agree, I think, that we do have statistically significant results here to show this encouraging trend.

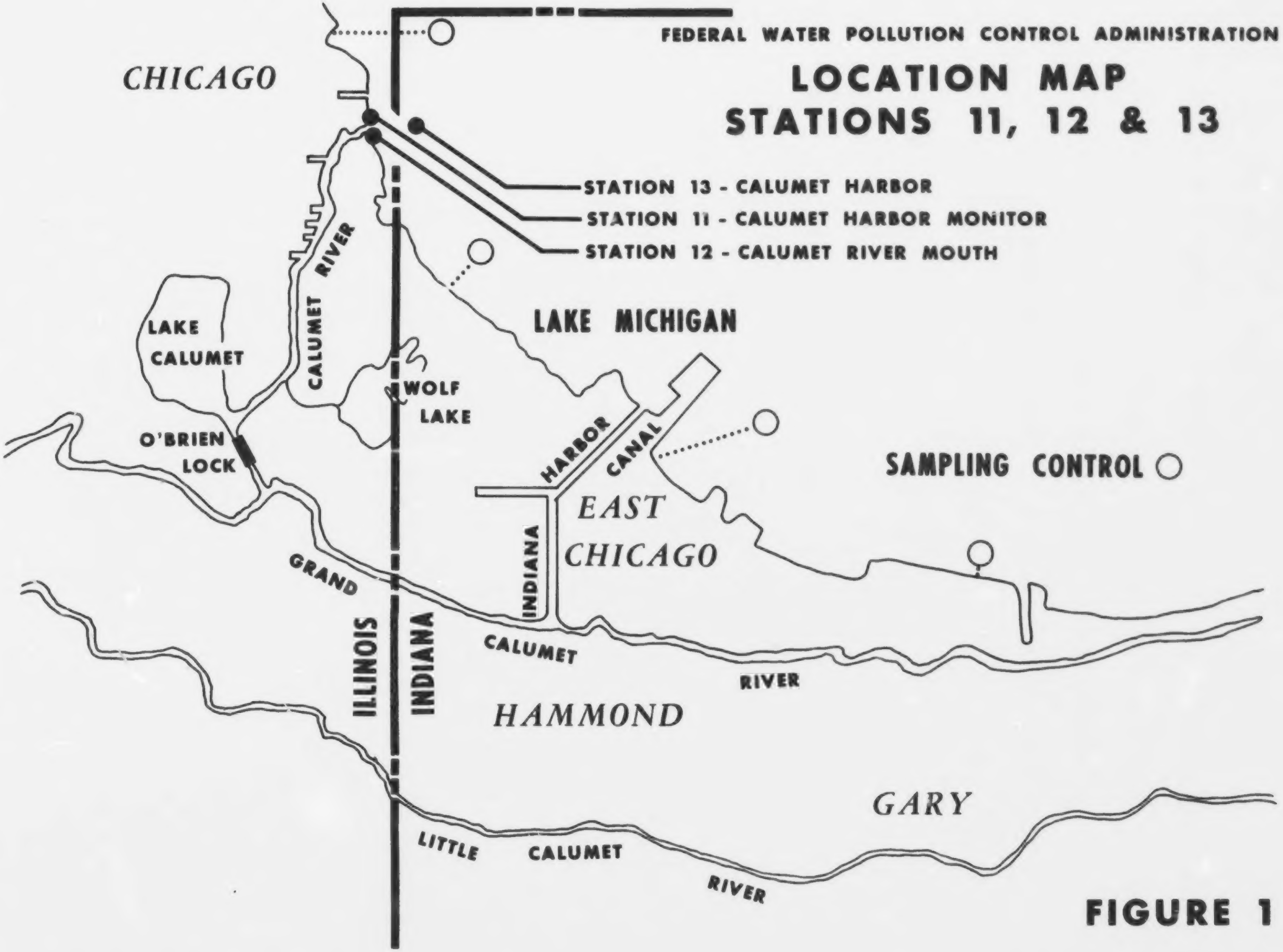
Of the fifteen Illinois industries reported upon at the December 11-12, 1968, Illinois-Indiana conference, seven are presently meeting Illinois effluent requirements. All of the eight still requiring improvements are in some stage of enforcement proceedings as will be reported upon in the following section by Mr. Bart Lynam, our Director of Research and Development, who has charge of the industrial waste control program.

You are going to use slides too, are you not, Mr. Lynam?

MR. LYNAM: Yes.

MR. BACON: If the conferees will remain down there, it will make it easier for them to see the slides.

(The following charts were submitted by Mr. Bacon and referred to in his statement:)


FEDERAL WATER POLLUTION CONTROL ADMINISTRATION

LOCATION MAP
STATIONS 11, 12 & 13

FIGURE 1

WATER QUALITY - STATION 11

Mouth of Calumet River

FECAL COLIFORMS

(per 100 ml)

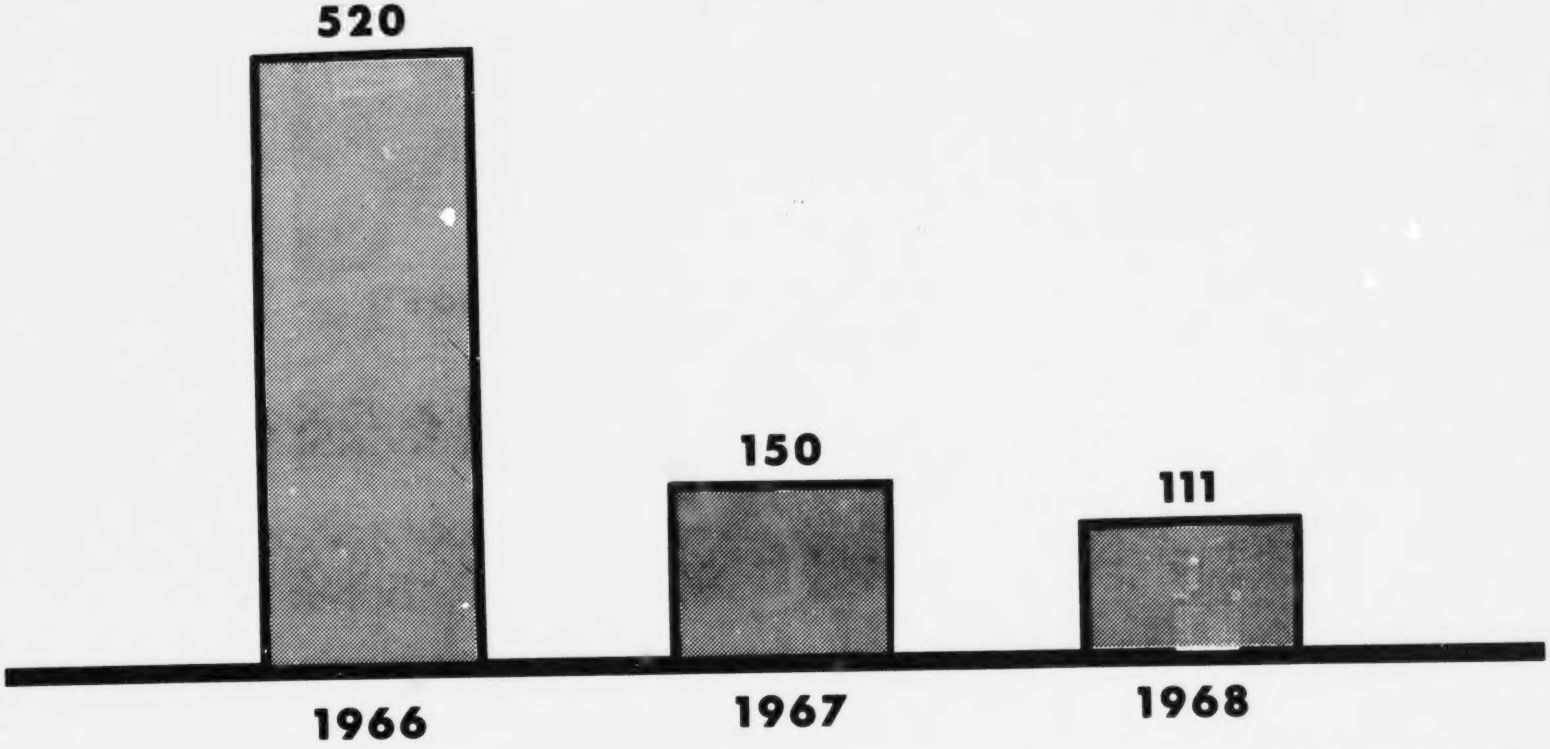


FIGURE 2

WATER QUALITY - STATION 11

Mouth of Calumet River

TOTAL PHOSPHORUS

(mg/l)

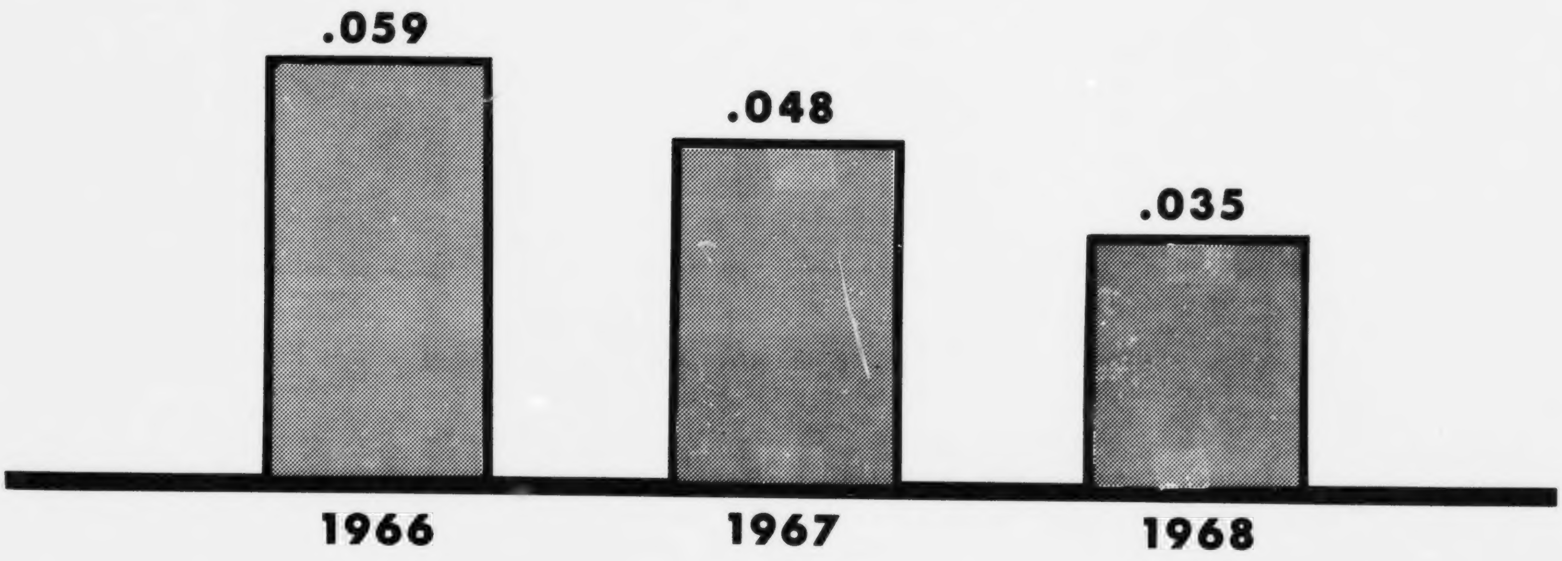


FIGURE 3

WATER QUALITY - STATION 11

Mouth of Calumet River

TOTAL IRON

(mg/l)

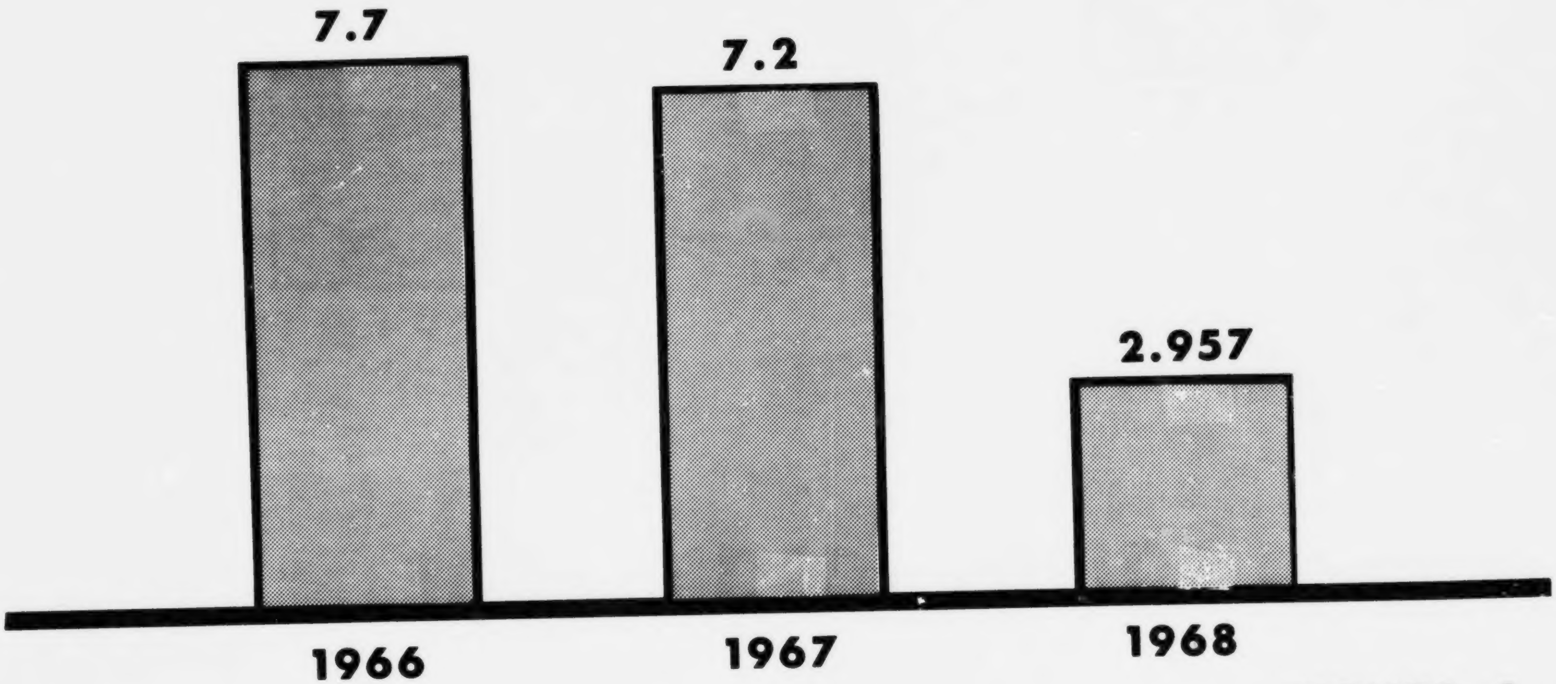


FIGURE 4

WATER QUALITY - STATION 11

Mouth of Calumet River

SUSPENDED SOLIDS

(mg/l)

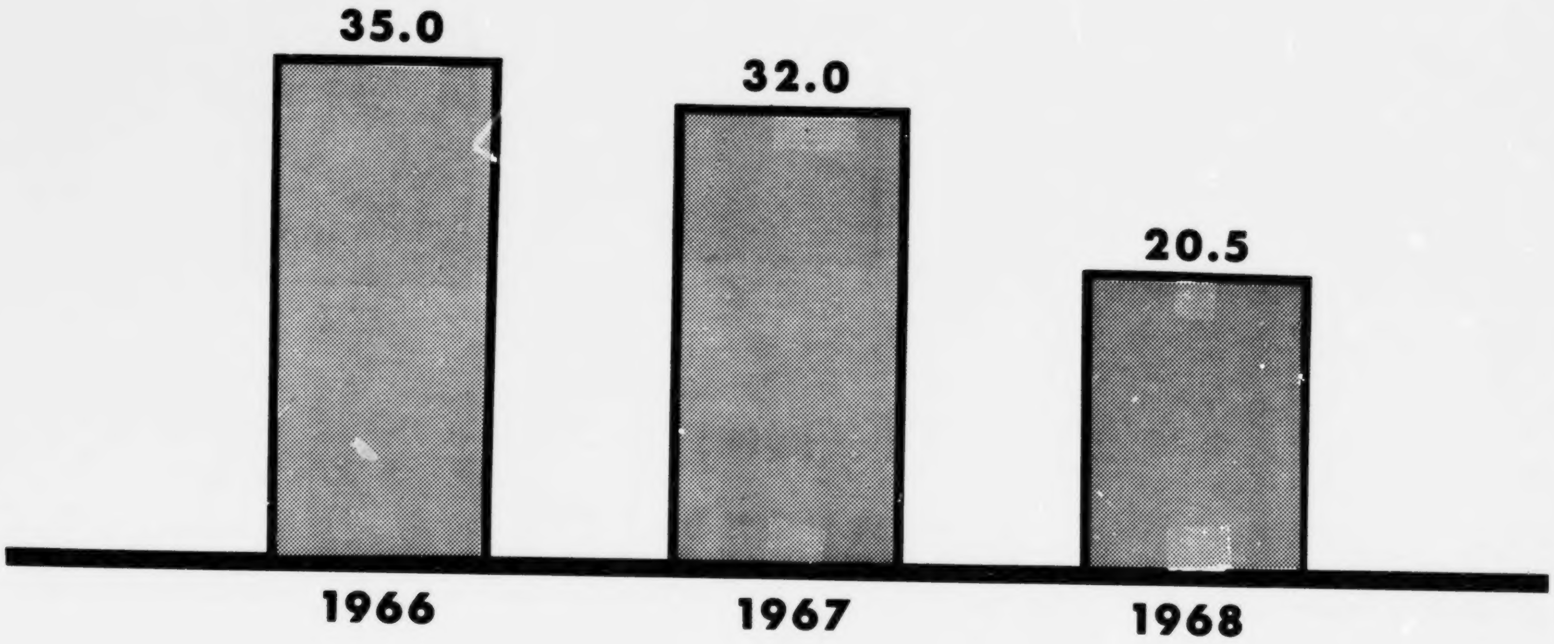


FIGURE 5

WATER QUALITY - STATION 11

Mouth of Calumet River

TURBIDITY

(units)

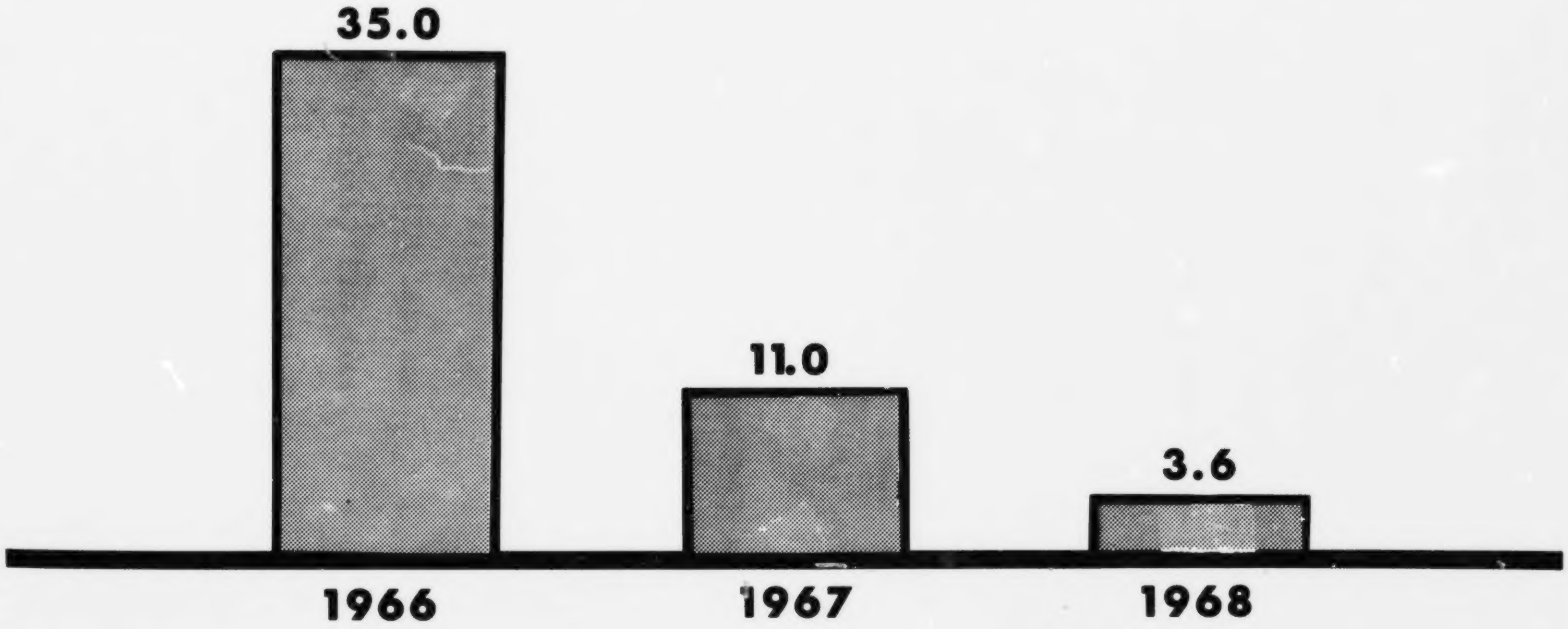


FIGURE 6

BART T. LYNAM, ACTING DIRECTOR
RESEARCH AND DEVELOPMENT
METROPOLITAN SANITARY DISTRICT
OF GREATER CHICAGO, CHICAGO, ILLINOIS

MR. LYNAM: My name is Bart Lynam. I am the Acting Director of Research and Development for the Metropolitan Sanitary District.

The following Illinois companies were included in the proceedings of December 11-12, 1968, Illinois-Indiana conference. There are fifteen companies:

Allied Chemical Company
Bulk Terminal Company
Chicago Brick Company
Commonwealth Edison Company, Calumet Station
General Mills Corporation
Gulf Oil Company (Spencer Chemical)(Cosden)
Swift and Company
United Chemical Company
Cargill Corporation
Catalin Corporation (Ashland Chemical)

Ford Motor Company
Interlake Steel Company
Wisconsin Steel Company
Republic Steel Company
United States Steel Company (South Works)

Seven of the companies are presently meeting State of Illinois effluent criteria. The following eight are exceptions:

Gulf Oil Company (Spencer Chemical, Cosden)
Cargill Corporation
Catalin Corporation (Ashland Chemical)
Ford Motor Company
Interlake Steel Company
Wisconsin Steel Company
Republic Steel Company
United States Steel (South Works)

I would like to report on the enforcement status of the companies not in compliance with the State of Illinois effluent criteria.

Gulf Oil, which is presently known as the Cosden Chemical Company. This company is constructing a closed recirculating cooling system with **cooling** towers and water treatment facilities.

A show cause hearing by the Sanitary District was held on August 2, 1969. The Chief Engineer has recommended that the Sanitary District Board of Trustees order the company, subject to the approval of the State of Illinois Sanitary Water Board, to complete pollution abatement facilities and to comply with waterway waste criteria by December 15, 1969. The proposed order would authorize the Metropolitan Sanitary District attorney to take legal action if company fails to comply or if the Water Board refuses to extend the September 30, 1969, deadline.

The second company, the Cargill Corporation, is composed of four individual divisions:

Rogers Terminal
Grain Elevator
Commodities Division
Vegetable Oil Division

A show cause hearing was held on August 19, 1969.

The Chief Engineer has recommended that the Board of Trustees order the company to be in compliance with waterway discharge regulations by September 30, 1969.

Company representatives stated that the company would be able to complete facilities to comply with the order.

The third company, the Catalin Corporation, is known as the Ashland Chemical.

By order dated November 26, 1968, the Sanitary District Board of Trustees ordered the company to complete pollution control facilities by June 24, 1969. The violation was based on failure of an industrial waste storage lagoon.

The company was ordered to immediately abate pollution of the waterway pending completion of permanent facilities.

The company complied with the order by constructing a temporary lagoon. There has been no reported pollution from the company since the Board Order.

On June 24, 1969, the Board extended the construction completion date to August 15, 1969. Construction of the new lagoon had been delayed due to wet weather. Construction has been substantially completed.

A testing program has been scheduled to

evaluate the plant compliance with waterway discharge criteria.

The fourth company, the Ford Motor Company.

The Sanitary District has filed a lawsuit to obtain compliance with a pollution abatement Order of the Sanitary District Board of Trustees.

At the present time the plant has discontinued discharge of effluent into the Calumet, other than stormwater and a small amount of cooling water.

Additional steps have been taken to prevent possible contamination of stormwater flow to the river.

Completion of all facilities to insure non-contamination of stormwater is scheduled for November 17, 1969.

A sampling program to determine if stormwater flows are contaminated has been ordered.

The fifth company, the Interlake Steel Company, (Chicago plant). I would like to have the first slide, please.

Analyses of effluent data for Interlake Steel Company **are** not available for the first six months of 1968. The attached table lists average monthly discharge from the Chicago plant.

B. T. Lynam

The Interlake plant, on the lake side of the O'Brien Lock, has operations on both sides of the Calumet River. Facilities for pollution control in the coke plant area have been completed. A floating device has been installed in the private slip to retain any accidental spills of oil from this area.

The blast furnace area presently discharges waste in violation of the State of Illinois effluent criteria.

The company is constructing a complete recycle system for the blast furnace gas washer water and the sinter plant effluent. Sanitary District Board of Trustees have ordered completion of necessary pollution control facilities by September 30, 1969. The Sanitary District attorney is authorized by the Board Order to proceed with legal action to enforce water pollution regulations, if company fails to comply.

The company is proceeding on schedule with construction of the recycle system. The company reports that operation of the completed system may be delayed until November 15, 1969, due to inadequate electrical supply. Demand for additional electricity was created by design change which includes recycle of sinter plant waste not included in original proposal.

The chart shows there has been a reduction in the monthly analysis of the 1968 to 1969 values for suspended solids, for hexanes. There was an increase in the cyanide values. There was a reduction in the phenols and there was an increase in the ammonia in terms of total pounds.

(Which said chart is as follows:)

INTERLAKE - CHICAGO
BLAST FURNACE AND SINTER PLANT
POUNDS PER DAY

		JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	Monthly Average
Suspended Solids	1968					48,341	13,095	19,149	8,547	71,666	12,762	9,975	17,104	25,080
	1969	16,928	11,871	7,872	10,178	26,432	12,780							14,344
HEXANE	1968					51,494	76,488	37,902	5,369	5,370	12,486	7,185	8,039	25,542
	1969	13,984	3,799	2,382	1,346	7,622	3,748							5,480
Cyanide	1968					49.3	26.9	39.1	21.3	45.1	47.8	16.8	42.0	36.0
	1969	33.1	25.2	31.8	39.5	37.8	84.9							42.1
Phenol	1968					64.9	70.9	103.9	73.4	80.3	39.6	55.9	2.15	72.6
	1969	49.44	110.03	158.35	29.45	19.5	13.1							63.3
NH3-N	1968					932.2	873.2	981.1	1024.4	1112.9	942.5	1092.2	1098.3	1005.9
	1969	1170.5	978.8	1892.0	1039.7	766.1	598.8							1071.3

* Based on data furnished by Company

MR. LYNAM: Next is the Wisconsin Steel Company.

The following table compares waste discharge for first six months of 1968 with first six months of 1969. Based on data furnished by the company and substantiated by the Sanitary District analysis. In 1968 compared to 1969 there was a reduction in suspended solids, a reduction in phenols, a reduction in cyanides, a reduction in hexane soluble materials, and a reduction in ammonia.

Pounds per Day - First Six Months of Year

1968

Suspended Solids	Phenols	Cyanides	Hexane Solubles	NH_3 - N
28,471	34.7	84.7	997	1542

1969

Suspended Solids	Phenols	Cyanides	Hexane Solubles	NH_3 - N
20,928	17.9	65.4	609	624

Only two outfalls, No. 5 and No. 6, of an original thirteen outfalls in 1964 remain in service. Wastewater discharged to the river has been reduced from 120 million gallons per day in 1964 to the present average of 50 million gallons per day. The company proposes complete recycle of all process water by June 1972.

The company is subject to a conciliation agreement as provided by State statutes. The agreement requires completion of all necessary pollution control facilities by September 30, 1969. Construction of necessary facilities to meet State of Illinois effluent criteria have been completed, but violations of suspended solids limit of 25 milligrams per liter and cyanide limit of 0.025 milligrams per liter have been reported.

The company is attempting to comply with the agreement by use of chemical coagulants to improve settling rates in existing thickeners.

Sampling analyses of plant outfalls reported by the company for the month of July show compliance with applicable waterway criteria.

The next slide.

The seventh company, Republic Steel Company.

The following table compares waste discharge for six months of 1968 with first six months of 1969. Based on data submitted by the company.

B. T. Lynam

This shows a reduction in the suspended solids, the phenols, cyanides and hexane solubles.

POUNDS PER DAY FIRST SIX MONTHS OF YEAR - CALUMET RIVER

	Suspended Solids	Phenols	Cyanide	Hexane Solubles
1968	48,740	47.2	177.7	5,946
1969	33,978	39.8	17.5	4,150

Interim reduction in concentrations of waste was accomplished by replacing a twelve-inch mill with a new fourteen-inch mill having adequate treatment facilities. Low cyanide in 1969 was caused by shutdown of blast furnace from March 28, 1969, to May 20, 1969.

Process water is now being recirculated in the Blast Furnace - Coke Plant, Open Hearths, Bar Mill Reheat Furnace and Blooming Mill area.

Negotiations with the company resulted in reducing the proposed construction schedule by a total of twenty months. That is, September 1, 1972, to December 31, 1970. The Sanitary District is not authorized to approve any complaince date beyond September 30, 1969, the date established by the State of Illinois for compliance with waterway effluent criteria.

Based on a stipulation entered into between the Sanitary District and the company, an Order was passed by the Board of Trustees requiring completion of the proposed facilities by September 30, 1969, with the understanding that the request of the company to extend the compliance date to December 31, 1970, would be forwarded by the District to the State of Illinois Sanitary Water Board for their consideration. The State Sanitary Water Board responded to the extension request and stated that no decision would be made until after the September 30, 1969, deadline.

In the event that the Sanitary Water Board does not grant the extension requested by Republic Steel Company, the order authorizes the attorney for the District to take such action as he should deem necessary and proper to force compliance with the applicable ordinance and statutes.

Construction Schedule

The company proposes three major projects:

1) Increase storage capacity for waste pickle liquor. Company proposes an additional 150,000 gallons of acid resistant storage capacity. Acid then

will be removed for off-site disposal.

2) New South Treatment Plant for mill waste having capacity to treat 12,960,000 gallons per day.

3) New North Treatment Plant will treat blast furnace gas washer water and other solids generated in the area.

The plant is designed to treat 5,328,000 gallons per day. The estimated cost of new facilities is in excess of $6 million. The company is proceeding on schedule with final plant operation scheduled for December 31, 1970.

The eighth company is the United States Steel Company--South Works, Calumet Harbor.

United States Steel Company-South Works is the only Illinois company discharging directly into the Calumet Harbor.

The following table compares the company's waste discharge to the harbor in pounds per day for the first six months of 1968 with the first six months of 1969. All values included in this report are based on analyses of monthly eight-hour composite samples submitted by the company. It shows a rather substantial reduction in the suspended solids concentration. There was an increase in the phenols. There was a reduction in cyanides, a reduction in hexane solubles, and there was an increase in the ammonia nitrogen.

Pounds per Day - First Six Months of Year

CALUMET HARBOR

1968

Suspended Solids	Phenols	Cyanide	Hexane	Ammonia Nitrogen
104,323	37.8	657.1	41,862	1,003

1969

Suspended Solids	Phenols	Cyanide	Hexane	Ammonia Nitrogen
57,014	82.8	134.2	23,072	1,432

The next slide compares the company's discharges to the Calumet River, and just to go ahead, I have a slide which recaps both of these. You see, we are splitting it in half showing what goes to the harbor, what goes to the river, and then a final slide, which I will show you later, is a recap.

This shows the pounds per day, a six-months comparison between 1968. This shows a reduction in all parameters listed: suspended solids a substantial reduction, phenols a substantial reduction, cyanide a substantial reduction, hexane solubles a substantial reduction, and a substantial reduction in ammonia.

Pounds per Day - First Six Months of Year

CALUMET RIVER

1968

Suspended Solids	Phenols	Cyanide	Hexane Solubles	Ammonia
237,324	58.6	899.9	5,667	1246

1969

Suspended Solids	Phenols	Cyanide	Hexane Solubles	Ammonia
12,745	3.4	17.4	2,368	169

The next table, the next slide, shows the total poundage from all wastes from the South Works. This includes the river and the Calumet Harbor and it shows the first six months of 1968 compared to the first six months of 1969, and here again it shows a very substantial reduction in the parameters there listed, suspended solids, phenols, cyanide, hexane solubles, and ammonia.

Pounds per Day - First Six Months of Year

Total Plant Discharge - River and Harbor

1968

Suspended Solids	Phenols	Cyanide	Hexane Solubles	Ammonia
341,647	96.4	1557.0	47,529	2249

1969

Suspended Solids	Phenols	Cyanide	Hexane Solubles	Ammonia
69,759	86.2	151.2	24,440	1600

The Sanitary District has filed a lawsuit in the Circuit Court of Cook County to prevent pollution of Lake Michigan. A temporary injunction has been issued by the court restraining the discharge of oil into Lake Michigan. Other issues are pending.

The company in the interim is proceeding with construction of a Central Treatment Plant and Blast Furnace Wastewater recycle system. The company has stated that completion of the system will result in compliance with State of Illinois effluent criteria.

Construction Schedule

1) Blast furnace gas washer water recycle system is designed to eliminate process waste discharge

from the blast furnace area into Calumet Harbor. The system is scheduled for initial operation November 1, 1970. Concrete form work for cooling tower foundations has been completed.

2) Structural mills cooling water recycle system is scheduled for initial operation May 1, 1970. Utilities relocating to serve this system is under construction.

3) Continuous caster scale pit effluent system is scheduled for initial operation September 1, 1970. Construction is scheduled to start November 1, 1969.

4) Central Treatment Plant is scheduled for completion December 31, 1970.

MR. STEIN: Thank you.

I wonder if any of the conferees want to come back up while we have comments or questions on a very excellent report from the Metropolitan District.

This is just a generalized comment. Something I think we possibly have to clarify--maybe Mr. Bacon wants to comment on this too--is the notion of the report we got from Mr. Pemberton which indicated little or no change and an improvement in the water quality here in the groups that Mr. Bacon pointed out, particularly at Stations 11, 12 and 13, and then in accordance with that comment, a very significant reduction reported in the kind of waste put out, and yet possibly the relationship of that to water quality not being as significant as someone other than an expert might imagine it.

MR. BACON: Mr. Chairman, as I pointed out, these are the same figures that were used in Mr. Pemberton's report, and I believe it is on page 4 of his report, where he is talking about Stations 11 and 13. He talks about the two together and the comments or the statements are essentially the same. We singled out the station most important to us in our measuring program, namely 11, to emphasize what considerable progress has been made.

I think I can say there is no contradiction between the two statements at all, no conflict.

MR. POSTON: Mr. Bacon, while the Chairman leaves the room, he asked me to keep this going. I have a couple of questions here pertaining to the reports you and Mr. Lynam made and I would particularly like to ask.

will the construction that is under way permit the meeting of the water quality standards?

MR. BACON: That is a question, of course, that we have struggled with every day that we have considered these two large dischargers and others. To the best of our technical ability, and assuming that the designs will be adequate and that the facilities, once constructed, will be properly operated and maintained, it is our opinion that the proposed construction will meet the State of Illinois water quality standards that we and the District are enforcing.

MR. POSTON: My second question has to do with schedules, and I wonder, in the construction in meeting these deadlines does the work schedule contemplate one shift per day or two shifts per day or three shifts per day?

MR. BACON: Mr. Poston, I think they have been asked to appear and I think that question could be more properly addressed to them. I don't know how many shifts per day they are going to work. I do know that after we boiled this thing down from sometime in 1972 to sometime in the latter part of 1970, we felt that we had gotten out of their construction schedule what we at one time called considerable fat. So I would answer that generally we believe that it is about as tight as it can be now.

Mr. Poston, may I add a word about their construction schedule, particularly U. S. Steel's?

MR. POSTON: Yes, sir.

MR. BACON: Although that has not been acted upon by the State Sanitary Water Board and although it has not been acted upon by the Sanitary District Board other than a very careful study of it, the schedule is being followed that we had attached to the stipulation, which is the detail of a considerable number of sheets which we have furnished to your office, to Secretary Klein's office and to Mr. Klassen's office. The schedule is quite complete and they are following that in anticipation of the completion being on or before December 31, 1970.

MR. POSTON: This is on the last page of your presentation?

MR. BACON: No, the construction schedule as submitted to us by U. S. Steel, and this is the fifth one that I mentioned, and that we have agreed to is document on legal cap about five or six pages long setting forth every piece of equipment facility that they will be constructing.

MR. POSTON: Yes.

MR. BACON: And I wanted to point out that there is no lack of action on the part of the company while action is pending on the part of this body, the State of Illinois and the Sanitary District.

MR. STEIN: Are there any other questions?

Mr. Klassen?

MR. KLASSEN: I just want to correct one statement here. In the letter referring to U. S. Steel, on the bottom of page 2 it says that the Sanitary District Board directed a copy of the stipulation be forwarded to the Sanitary Water Board with a request for the Sanitary Water Board to indicate in writing its approval and upon receipt thereof the District give this matter further consideration.

For the record, this stipulation was sent to the Sanitary Water Board approximately a week ago, but it was requested that we give it our comments and not approval as indicated here. I want the record to show that comments were requested and our comments were given in a letter to the District August 19th.

MR. BACON: Thank you very much, Mr. Klassen, for that correction. I picked that up this morning too. First of all, we reported that orally and then we sent it down in a somewhat informal way. And so thanks for the correction. The end result we hope will be the same.

MR. STEIN: Are there any other comments or questions?

MR. BACON: Mr. Chairman, thank you very much for the opportunity of appearing. If you want us back for any reason, we will come back. I hope the record will clearly show, and the memories will serve that record, that we did appear here today. (Laughter.)

MR. STEIN: I don't think anyone can forget your appearances. (Laughter.)

But I will say in summary, I do think that what we have is a report of the Sanitary District moving on all the significant sources of wastes within the jurisdiction of the District and we have got a report in pretty much significant detail of what the Sanitary District is doing.

Now, again let me indicate this in summary. The point is, I think the District and the industries concerned are proceeding as best they and everyone knows how, on the substance of putting in treatment facilities which are going to meet the water quality requirements we have for the particular waters. The question of when they are going to do it has been laid out and this is a determination for the conferees to consider. But I do not think there is any case--and if there is I would like to know--of any specific significant industrial source in the District that the Sanitary District does not have a program for on which to move ahead.

Now, we face this larger question. This does not apply to the Sanitary District alone, but it applies to the sources outside the District, in Indiana and Illinois. I say this to all concerned here, that even if all this work is done, are we going to get the kind of water quality that we are working toward with this program? I know we can get diverted on these dates and pushes and material here, but I have the feeling that we are possibly over the hump in this aspect of the case. The next real task we have to get moving on is an analysis whereby we are going to have a unified report indicating a prediction pretty soon by the scientists in all four jurisdictions concerned: 1) whether the completion of this work is going to give us the water quality we need; and 2) if it isn't, what more we have to do to get it. Because I know everyone is going to be unhappy if all this work is completed and someone comes in with an analysis of some water and says the fecal coliforms are high, or the ammonia is creeping up, or the water is degraded, or it is not as good as it was when we started. This is our objective and what we have to do.

Now, again--and I say this as something I know can be done because we have done it here; we have done it in other places--what we are dealing with are physical facts subject to measurement. I know there may be honest differences of opinion among the technical people who do the evaluating, but I think it would help, really help, the conferees if we could get a unified statement of all the jurisdictions concerned in relation to water quality and trends in water quality. If there is any difference, of course, it should come to the attention of the conferees. But I don't think that the conferees should get differences because of possibly a different emphasis on a treatment source or a different use of methodology, etc. These are technical matters which surely the technical people can achieve.

I do believe that we are going to have an obligation from here on out indicating to the people of the area precisely what the water quality improvement results are of this remedial program, and this is what we face.

I think the report we have gotten from the Sanitary District brings us a long way toward that. I think the report of the Sanitary District this morning and the other reports we have also have enabled us to zero in with precision on every significant source that we know of. Now, things may develop in the future or may come up that we don't recognize now, but I am sure we have presented as clear a picture as we can.

We are going to recess for lunch now. This afternoon we are going to call on United States Steel and Republic Steel for a presentation and then we will hear from Illinois and Indiana.

But first before we go, is Mr. Nicholas Melas here?

Nick, I think you have a statement from a Congressman you would like to put into the record.

ABNER J. MIKVA
CONGRESSMAN
SECOND CONGRESSIONAL DISTRICT
OF ILLINOIS
(READ BY NICHOLAS J. MELAS, TRUSTEE
METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO)

MR. MELAS: Mr. Chairman and conferees.

I am Nicholas Melas, Trustee of the Metropolitan Sanitary District, and also a resident of the 2nd Congressional District of Illinois. The Congressman from my District asked me if I would present a statement on his behalf.

A. J. Mikva

This is a statement of the Honorable Abner J. Mikva, Congressman, Second District, Illinois.

(Which said statement is as follows:)

STATEMENT OF
HONORABLE ABNER J. MIKVA
# of ILLINOIS
BEFORE THE CALUMET ENFORCEMENT CONFERENCE
ON LAKE MICHIGAN

Chicago, Illinois

August 26, 1969

Mr. Chairman: The residents of the 2nd Congressional District have waited far too long for an end to pollution in the Calumet area. They must not be asked to wait longer.

They have been promised clean water for years. Thirteen years ago the Water Quality Act provided for abatement conferences. Four years ago this Conference found the waters badly polluted and recommended action. It has been three years since the Conference laid down water-quality criteria and set December 1968 as the deadline for completion of pollution-control facilities. It was February 1968 when I urged the Lake Michigan Four State Pollution Conference to take immediate steps to begin restoration of the Lake. Yet, despite all of these deadlines and warnings, at last report the water was just as dirty as it was in 1965.

The December 1968 deadline was a generous one. It allowed nearly three years for the installation of facilities that should have been installed long before. Many companies proceeded in good faith to comply. But United States Steel and Republic Steel did not. Neither company even submitted preliminary plans on schedule.

This behavior must not be condoned. Water pollution today is unforgivable, because we have the technology and the money to eliminate it. The public expects this Conference to do something about it. To extend the deadline for companies that have thumbed their noses at the public interest would make this

Conference a cruel hoax and break faith with the people. The Conference has an obligation to recommend strict sanctions against polluters who do not comply with the abatement schedule.

It is time to let those who treat our lakes and streams as sewers know that procrastination will no longer be taken for an answer. The 1968 deadline must not be extended. It must be enforced.

If somebody throws garbage on the street, he is properly punished. We cannot afford the naive thought that our lakes and streams are any less precious than our asphalt.

MR. MELAS: That is the statement of the Congressman.

(Applause.)

MR. STEIN: Thank you, Mr. Melas.

We will stand recessed for lunch for an hour and a half. That means we will return at 20 to 2.

(NOON RECESS)

TUESDAY, AUGUST 26, 1969

AFTERNOON SESSION

MR. STEIN: Let's reconvene.

May we hear from Republic Steel.

GEORGE J. GOCKSTETTER, SUPERINTENDENT
FUEL-POWER-AIR & WATER MANAGEMENT
REPUBLIC STEEL CORPORATION
CHICAGO, ILLINOIS

MR. GOCKSTETTER: Chairman Stein, conferees.

My name is George Gockstetter. I am employed as Superintendent of the Fuel-Power-Air & Water Management at Republic Steel's South Chicago Plant. I have been with the Republic Steel since 1943.

Republic has had a continuing program of pollution control and water management consistent with water quality requirements for the Calumet River. Various aspects of this program have been discussed in previous statements made by Republic to this conference.

Between 1958 and 1967 Republic invested more than $5 million in new water pollution control facilities. We are now proceeding on schedule towards completion of new facilities costing an additional $6 million. Some of the projects initiated since 1958 and continuing through the 1965 conference are:

In 1958, the plant's new eleven-inch Bar Mill was placed in operation. This mill featured the latest equipment available for the recovery of oil and mill scale which otherwise would be discharged to the Calumet River. Adjacent to this mill is a ten-inch bar and rod mill which previously did not have adequate pollution control equipment and this was at the same time connected to a new pollution control facility, the eleven-inch mill.

In 1961, we installed the first of five mechanical cleaning facilities to replace acid cleaning of mill scale from bar products. This reduced the amount of waste pickle liquor being discharged.

In 1964, we installed three additional grit blast cleaning facilities. These installations, with those instituted in 1961, reduced the amount of acid used by 65 percent.

In 1965, continuous oil removal equipment was installed in the scale recovery facilities for both the eleven-inch and ten-inch bar mills.

In 1965, we contracted with an outside firm to make off-site disposal of all of the remaining spent pickle liquor.

In September 1966 we retained an outside engineering firm to make an in-depth survey of the plant to determine what terminal treatment facilities could be provided to satisfy whatever requirements might be established by the State or Metropolitan Sanitary District authorities with respect to water quality in the Calumet River.

In 1967 Republic completed and placed in operation a new multi-million dollar fourteen-inch Bar Mill with a $1,750,000 closed recirculating water system to recover oil and scale and prevent river pollution. This new mill, with the most modern waste control equipment available, replaced an existing twelve-inch Bar Mill which had not been equipped with adequate pollution control devices. The twelve-inch mill was shut down and dismantled and thus eliminated that discharge.

In April 1968 the Illinois Sanitary Water Board's Rules and Regulations SWB-15 established requirements relating to water quality of the Calumet River. In June Republic submitted a program to meet the requirements. The program calls for the construction of three terminal wastewater treatment plants designed so the Chicago plant will meet the water quality criteria adopted for the Calumet River under SWB-15.

I have here two photographs of artist's drawings showing how the new water treatment facilities will look after construction is completed. The photographs are captioned "Water Treatment Plants #1 and #2 Waste" and "Water Treatment Plant #3 Waste." I also have included in your packet, gentlemen, a CPM Revision 4, which was referred to previously, which outlines our Critical Path Method of determining and detailing the engineering, procurement and construction time schedules with respect to these plants. I would like to submit these photographs, together with a copy of the revised CPM diagram and plans of the treatment plants dated November 15, 1968, which are shown in these drawings in the back.

MR. STEIN: Do you want this in the record?

MR. GOCKSTETTER: Yes, sir.

MR. STEIN: Let us try to put these in the record. I am going to try to, if I can, reduce this Critical Path method to one page. Would that be all right? Because if we try this insert folded in this size for the record, it is going to push the price way up.

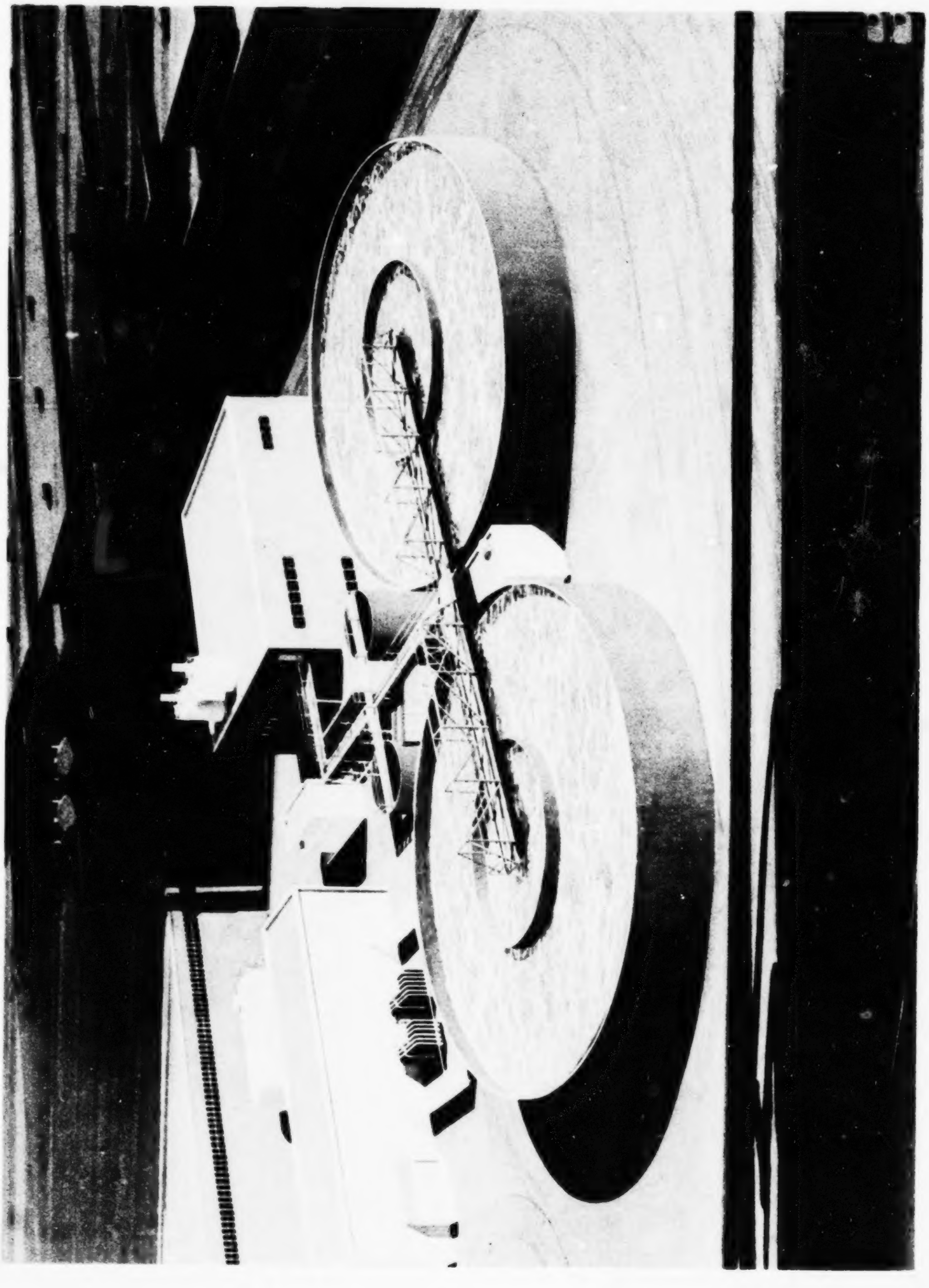
MR. GOCKSTETTER: I see.

(Laughter.)

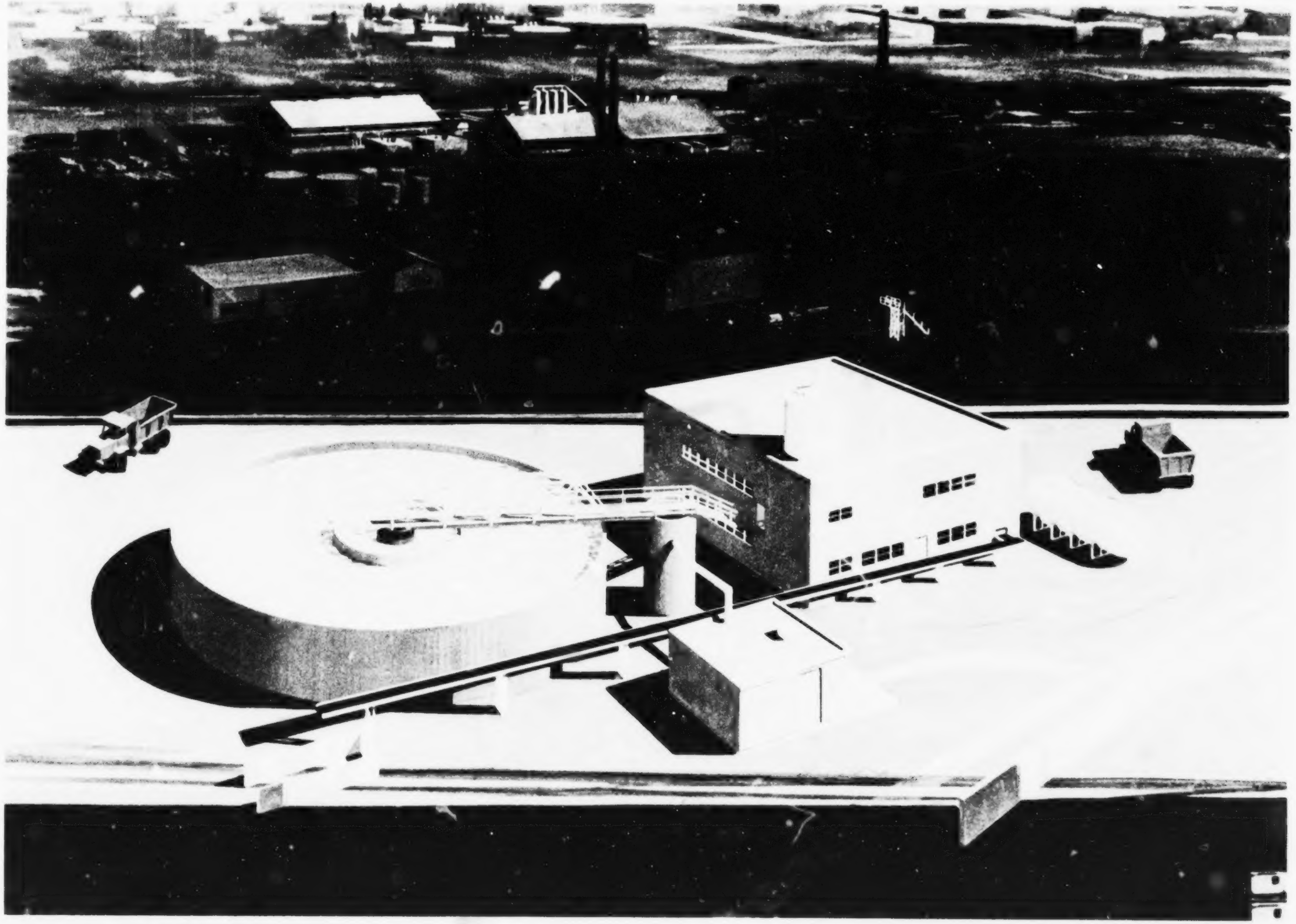
MR. STEIN: What you have to do is get a special hand print job and a hand insert on each one. But I think this will come through. If we can't do it, we will expand it.

O. K., thank you.

(Which said photographs and documents are as follows:)

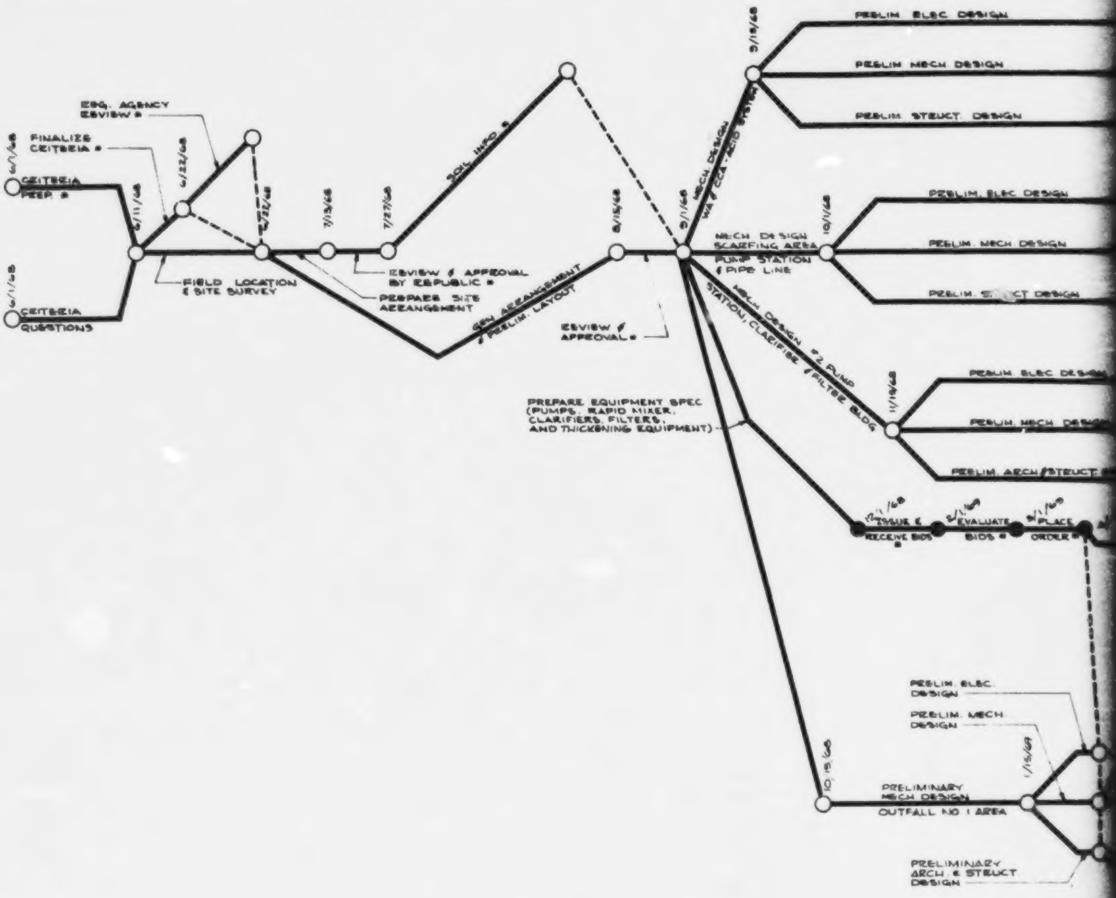


Water Treating Plants #1
and #2 Waste

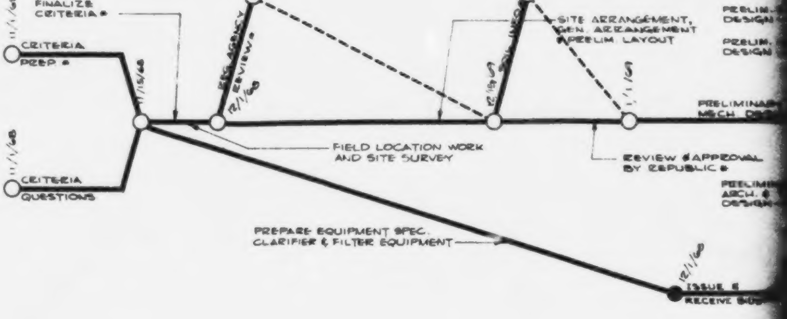


Water Treating Plant #3 Waste

A



PLANT 1&

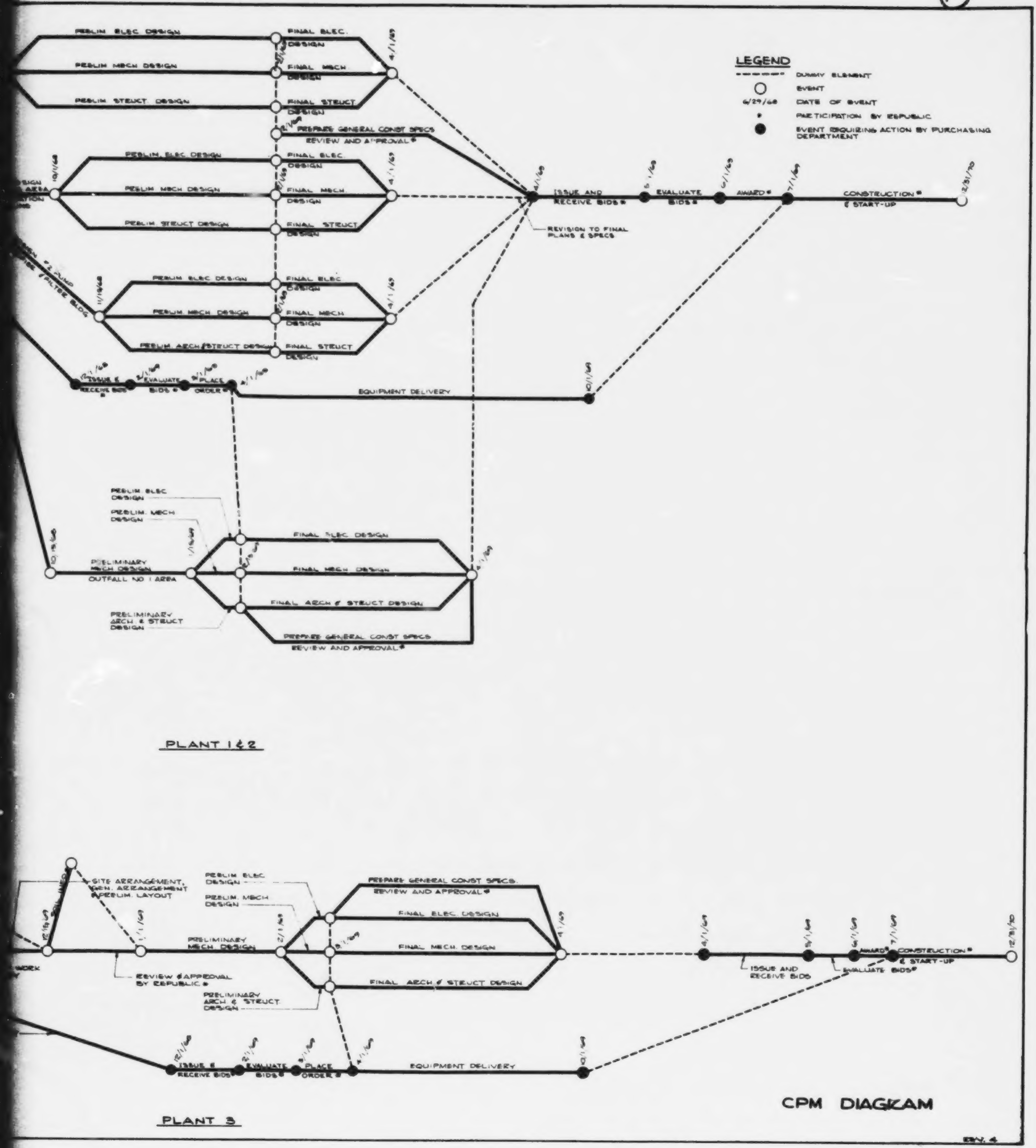


PLANT 3

STANLEY CONSULTANTS

INTERNATIONAL CONSULTANTS IN ENGINEERING, ARCHITECTURE, PLANNING, AND MANAGEMENT

B



CPM DIAGRAM

REV. 4

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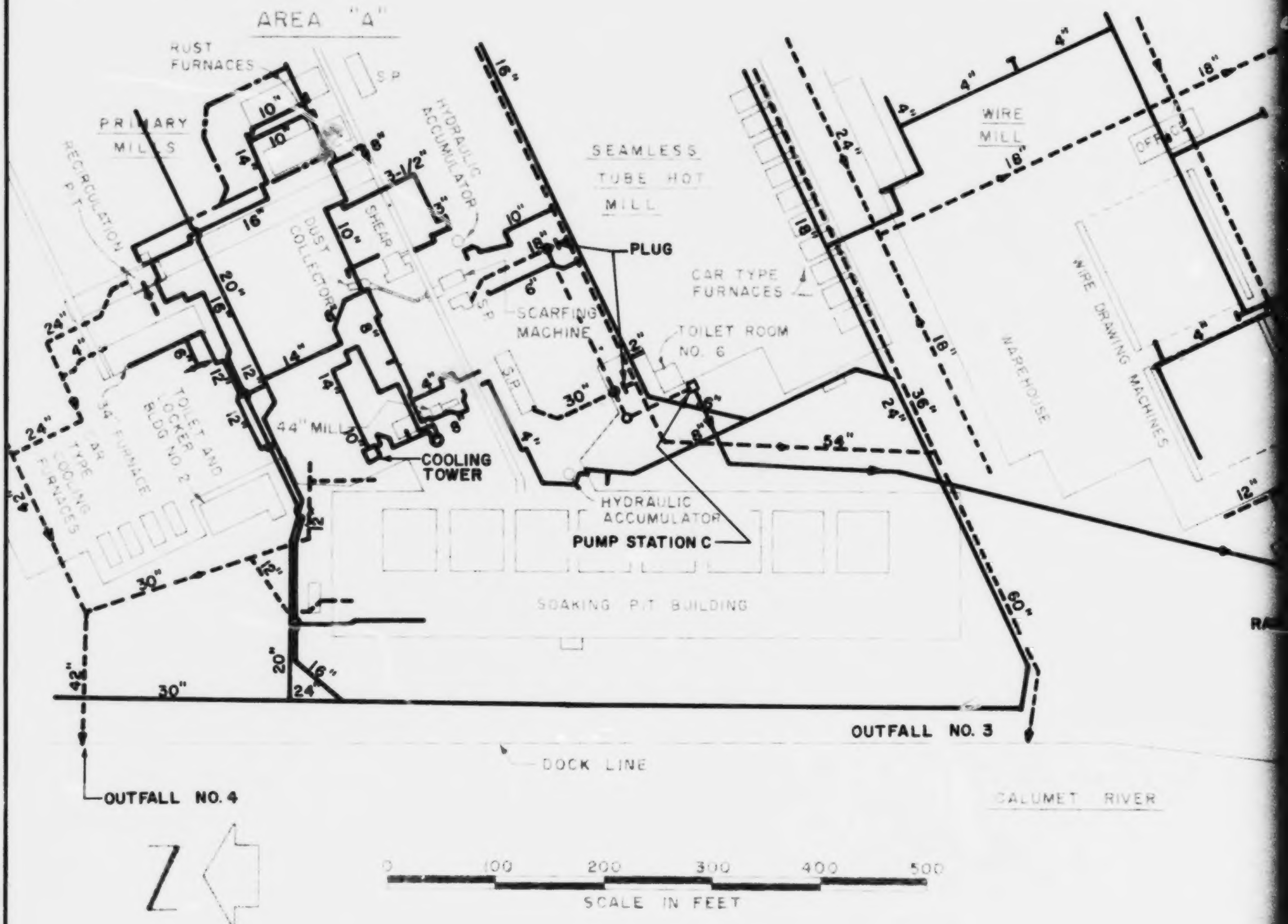
REPUBLIC STEEL CORPORATION

CHICAGO DISTRICT

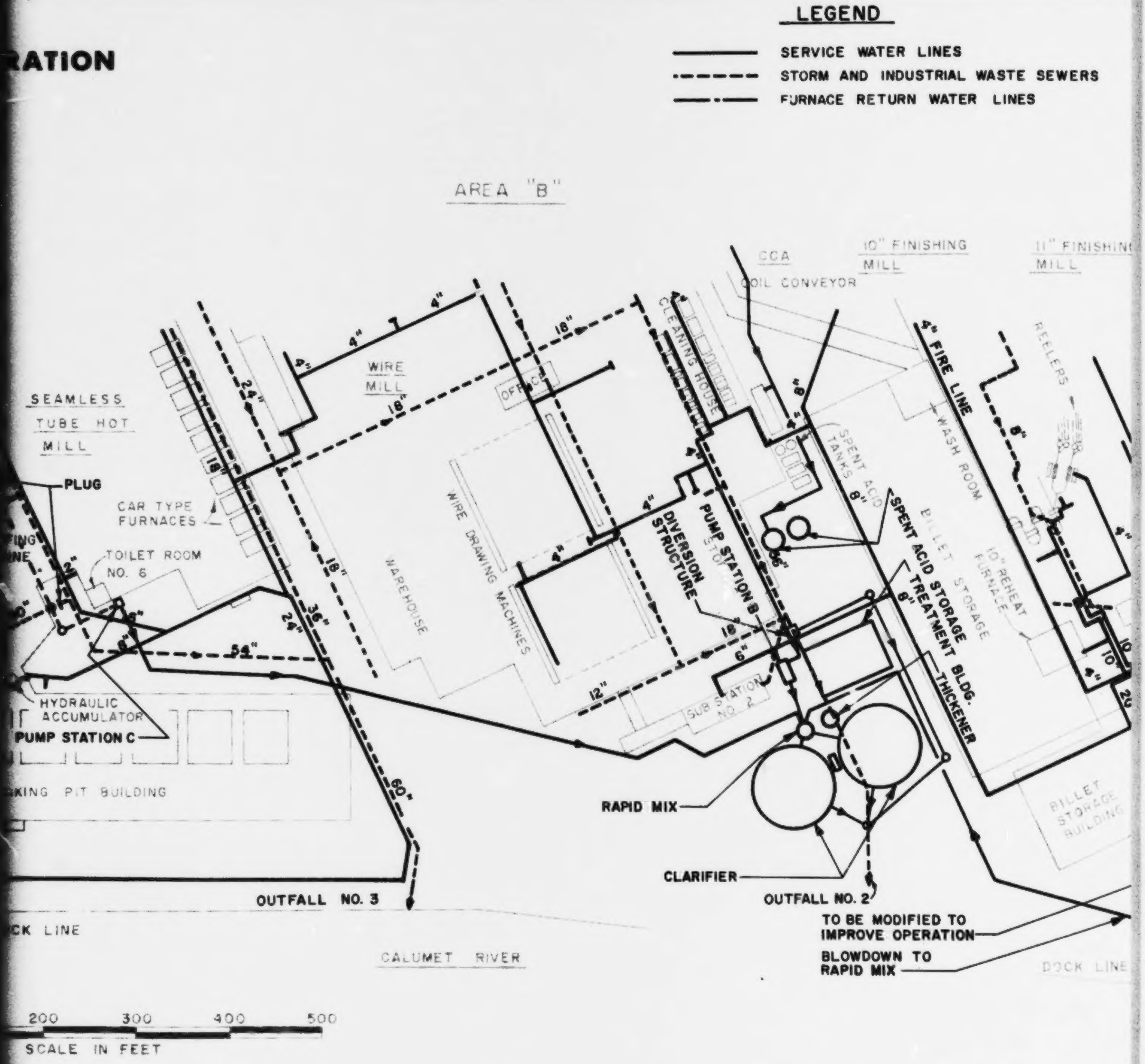
PLANT 1 & 2

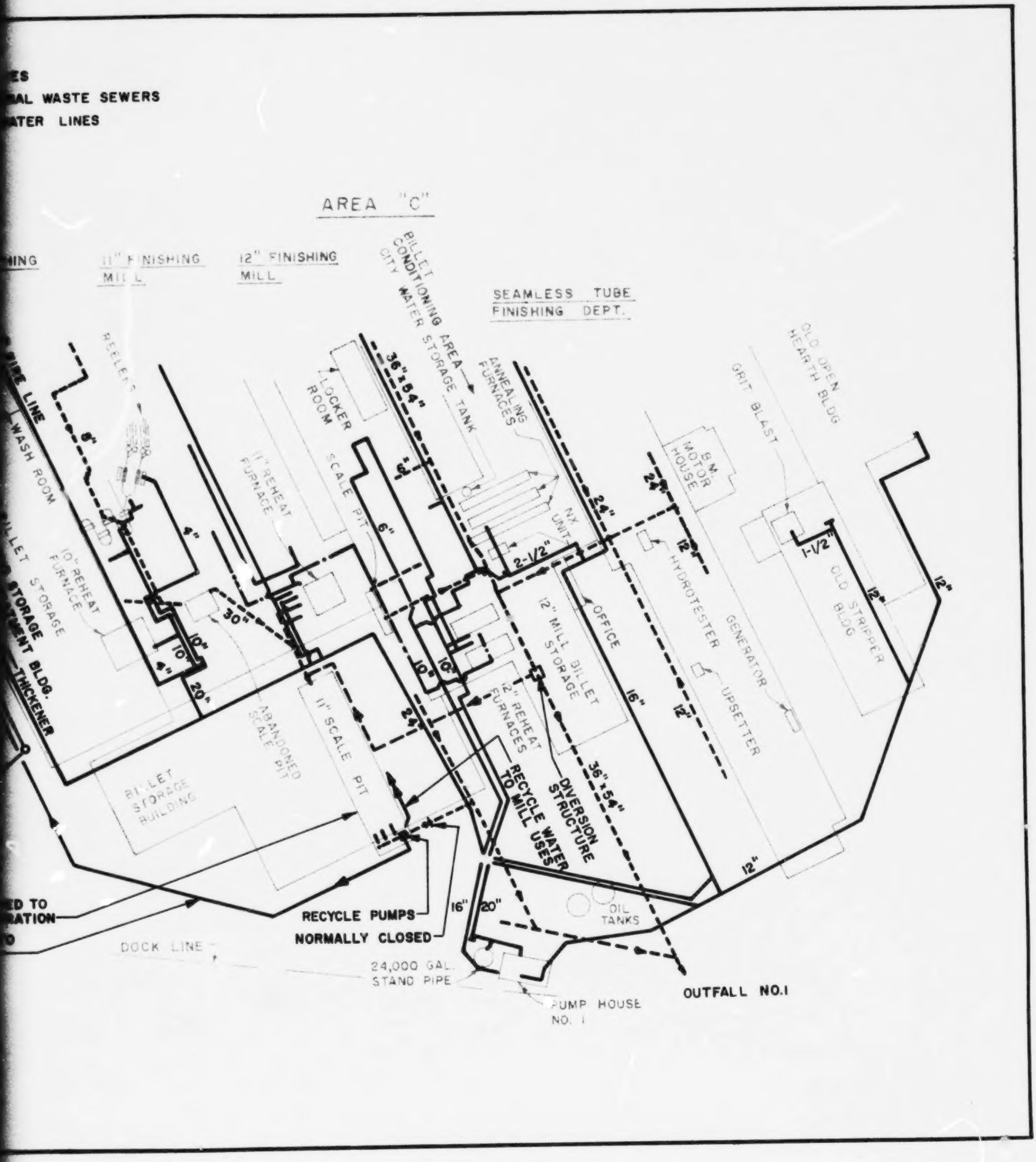
NOV. 15, 1968



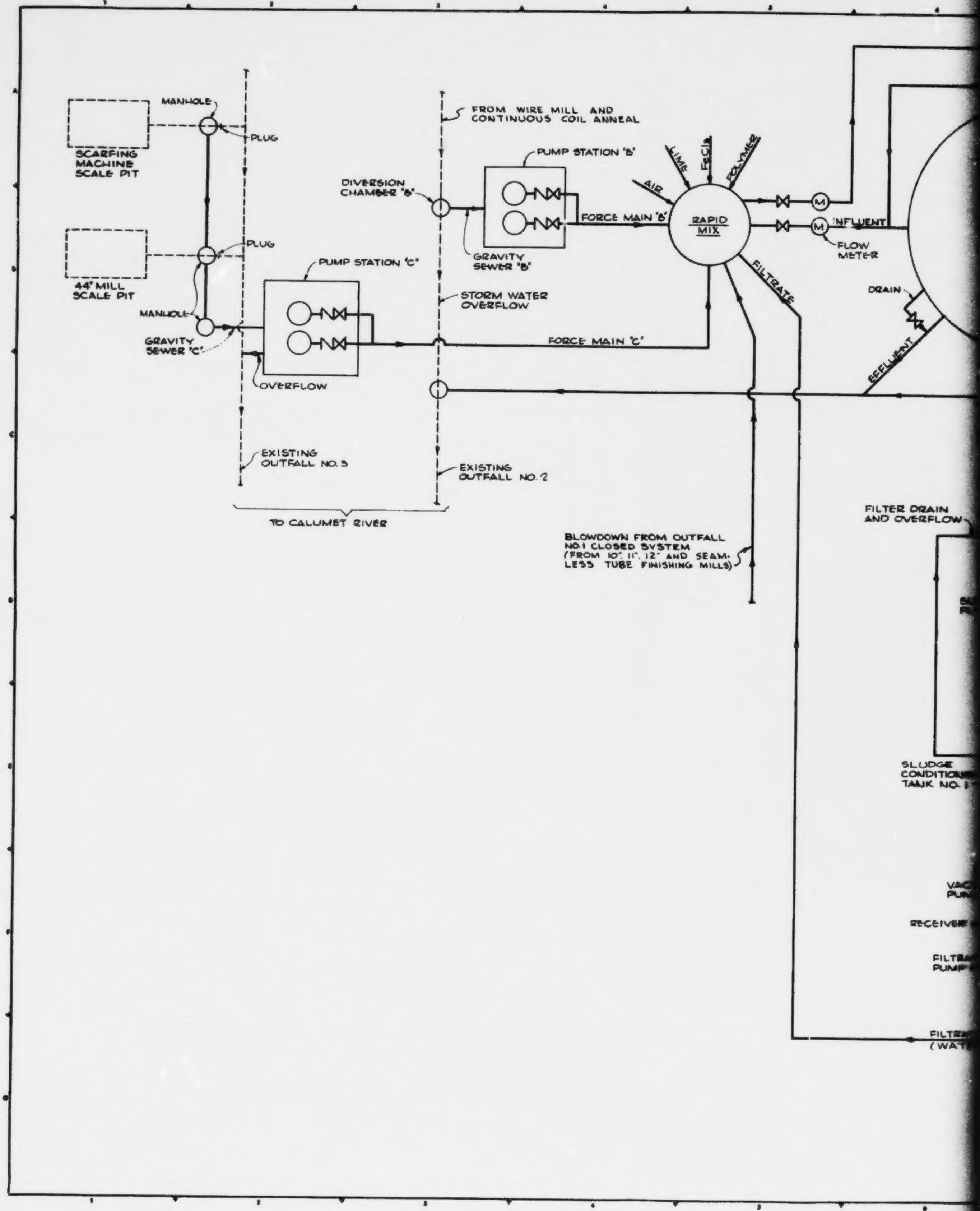
B

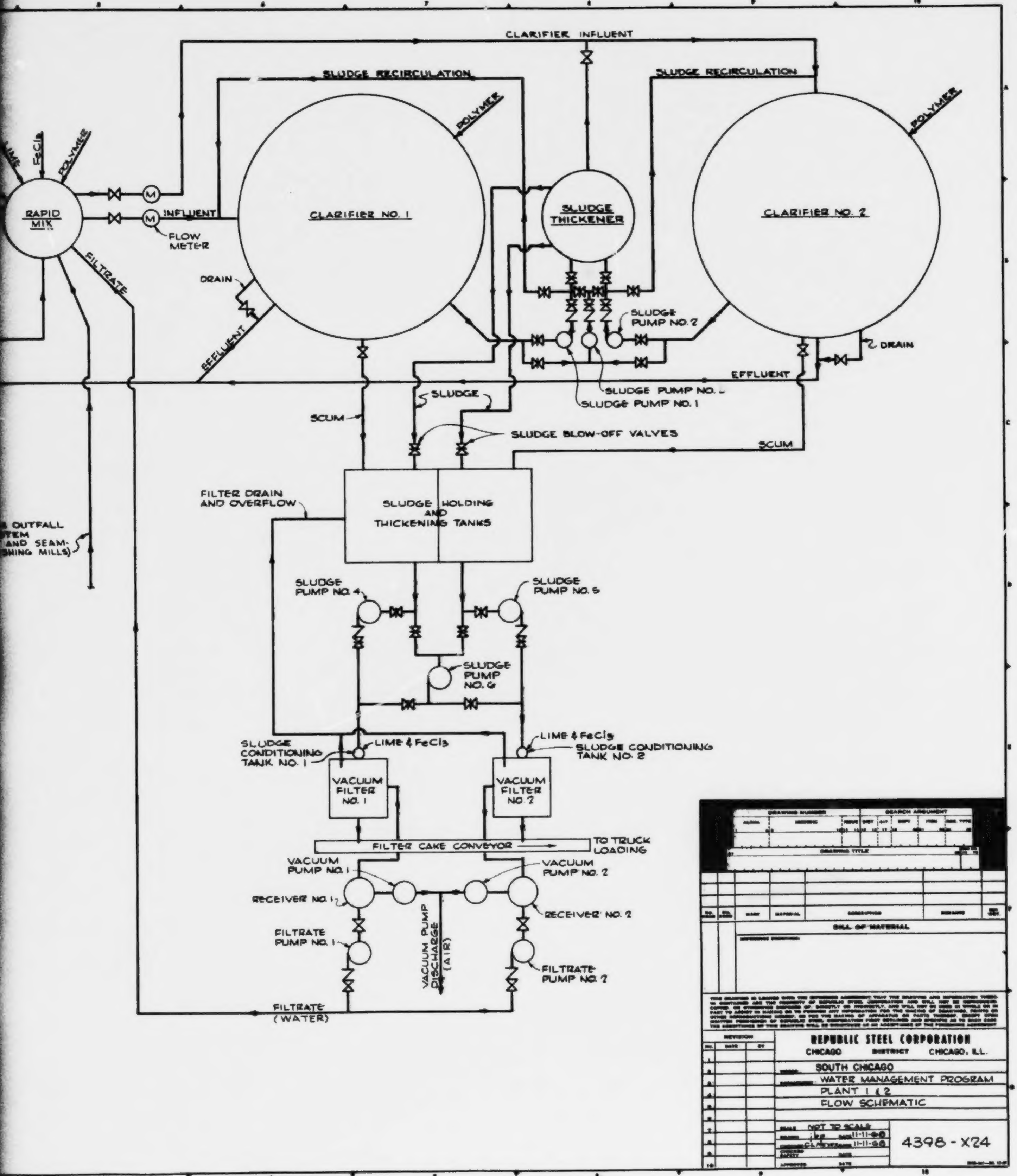
RATION


LEGEND
SERVICE WATER LINES
STORM AND INDUSTRIAL WASTE SEWERS
FURNACE RETURN WATER LINES
AREA "B"
SEAMLESS TUBE HOT MILL
PLUG
CAR TYPE FURNACES
TOILET ROOM NO. 6
HYDRAULIC ACCUMULATOR
PUMP STATION C
KING PIT BUILDING
WIRE MILL
OFFICE
WAREHOUSE
WIRE DRAWING MACHINES
DIVERSION STRUCTURE
PUMP STATION B
CLEANING HOUSE
CCA
COIL CONVEYOR
10" FINISHING MILL
11" FINISHING
MILL
SPENT ACID TANKS
SPENT ACID STORAGE
TREATMENT BLDG.
WASH ROOM
BILLET STORAGE
10" REHEAT FURNACE
REELERS
4" FIRE LINE
SUB STATION NO. 2
THICKENER
RAPID MIX
CLARIFIER
BILLET STORAGE BUILDING
OUTFALL NO. 3
OUTFALL NO. 2
TO BE MODIFIED TO IMPROVE OPERATION
BLOWDOWN TO RAPID MIX
CK LINE
DOCK LINE
CALUMET RIVER
4"
18"
24"
36"
54"
60"
12"
6"
8"
10"
20
200
300
400
500
SCALE IN FEET


ES
AL WASTE SEWERS
ATER LINES
AREA "C"
HING
11" FINISHING MILL
12" FINISHING MILL
BILLET CONDITIONING AREA
CITY WATER STORAGE TANK
SEAMLESS TUBE FINISHING DEPT.
OLD OPEN HEARTH BLDG
GRIT BLAST
ANNEALING FURNACES
B.M. MOTOR HOUSE
REELERS
LOCKER ROOM
36"x54"
FIRE LINE
WASH ROOM
8"
11" REHEAT FURNACE
SCALE PIT
6"
NX UNIT
24"
24"
12"
1-1/2"
2-1/2"
OLD STRIPPER BLDG
12"
12"
BILLET STORAGE
10" REHEAT FURNACE
4"
30"
10"
10"
4"
20"
STORAGE
TMENT BLDG.
THICKENER
12" MILL BILLET STORAGE
OFFICE
HYDROTESTER
GENERATOR
UPSETTER
16"
12"
10"
10"
24"
24"
12" REHEAT FURNACES
ABANDONED SCALE PIT
11" SCALE PIT
BILLET STORAGE BUILDING
DIVERSION STRUCTURE
RECYCLE WATER TO MILL USES
36"x54"
12"
ED TO
RATION
TO
RECYCLE PUMPS
NORMALLY CLOSED
16"
20"
OIL TANKS
DOCK LINE
24,000 GAL. STAND PIPE
PUMP HOUSE NO. 1
OUTFALL NO.1

A


SCARFING MACHINE SCALE PIT
MANHOLE
PLUG
PLUG
44" MILL SCALE PIT
MANHOLE
GRAVITY SEWER 'C'
PUMP STATION 'C'
OVERFLOW
EXISTING OUTFALL NO. 3
TO CALUMET RIVER
FROM WIRE MILL AND CONTINUOUS COIL ANNEAL
DIVERSION CHAMBER 'B'
PUMP STATION 'B'
GRAVITY SEWER 'B'
STORM WATER OVERFLOW
EXISTING OUTFALL NO. 2
FORCE MAIN 'B'
FORCE MAIN 'C'
AIR
LIME
$FeCl_3$
POLYMER
RAPID MIX
FILTRATE
M
M
INFLUENT
FLOW METER
DRAIN
EFFLUENT
BLOWDOWN FROM OUTFALL NO. 1 CLOSED SYSTEM (FROM 10", 11", 12" AND SEAMLESS TUBE FINISHING MILLS)
FILTER DRAIN AND OVERFLOW
SLUDGE CONDITION
TANK NO. 1
VAC
PUM
RECEIVER
FILTRA
PUMP
FILTRA
(WAT



REPUBLIC STEEL CORPORATION
CHICAGO DISTRICT CHICAGO, ILL.

SOUTH CHICAGO
WATER MANAGEMENT PROGRAM
PLANT 1 & 2
FLOW SCHEMATIC

SCALE NOT TO SCALE
DRAWN jkp DATE 11-11-68
CL DATE 11-11-68

4398 - X24

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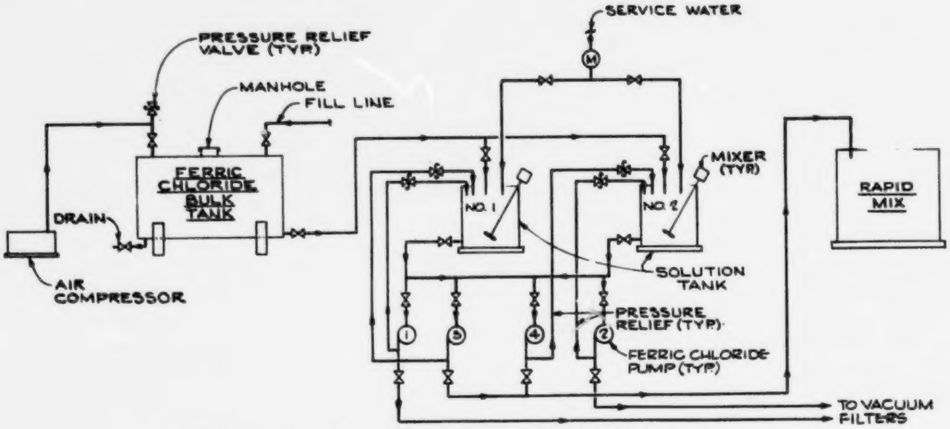
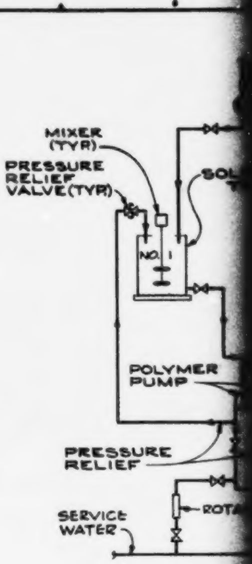
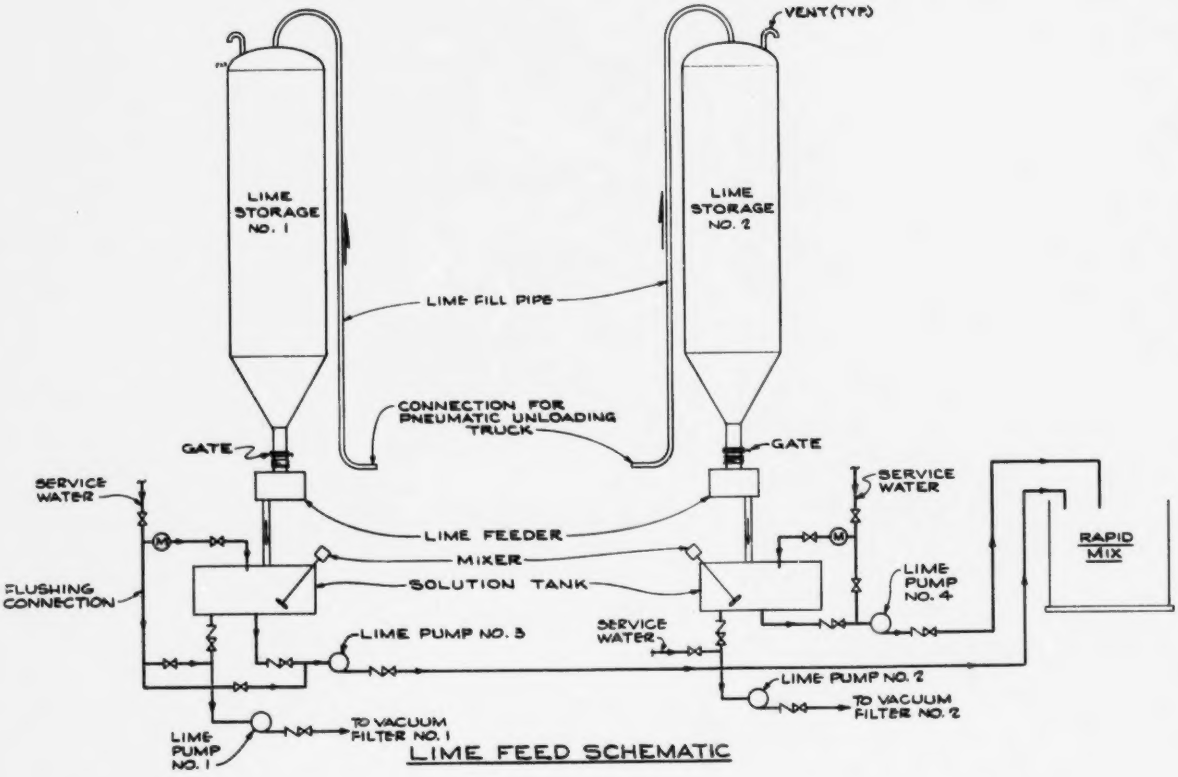
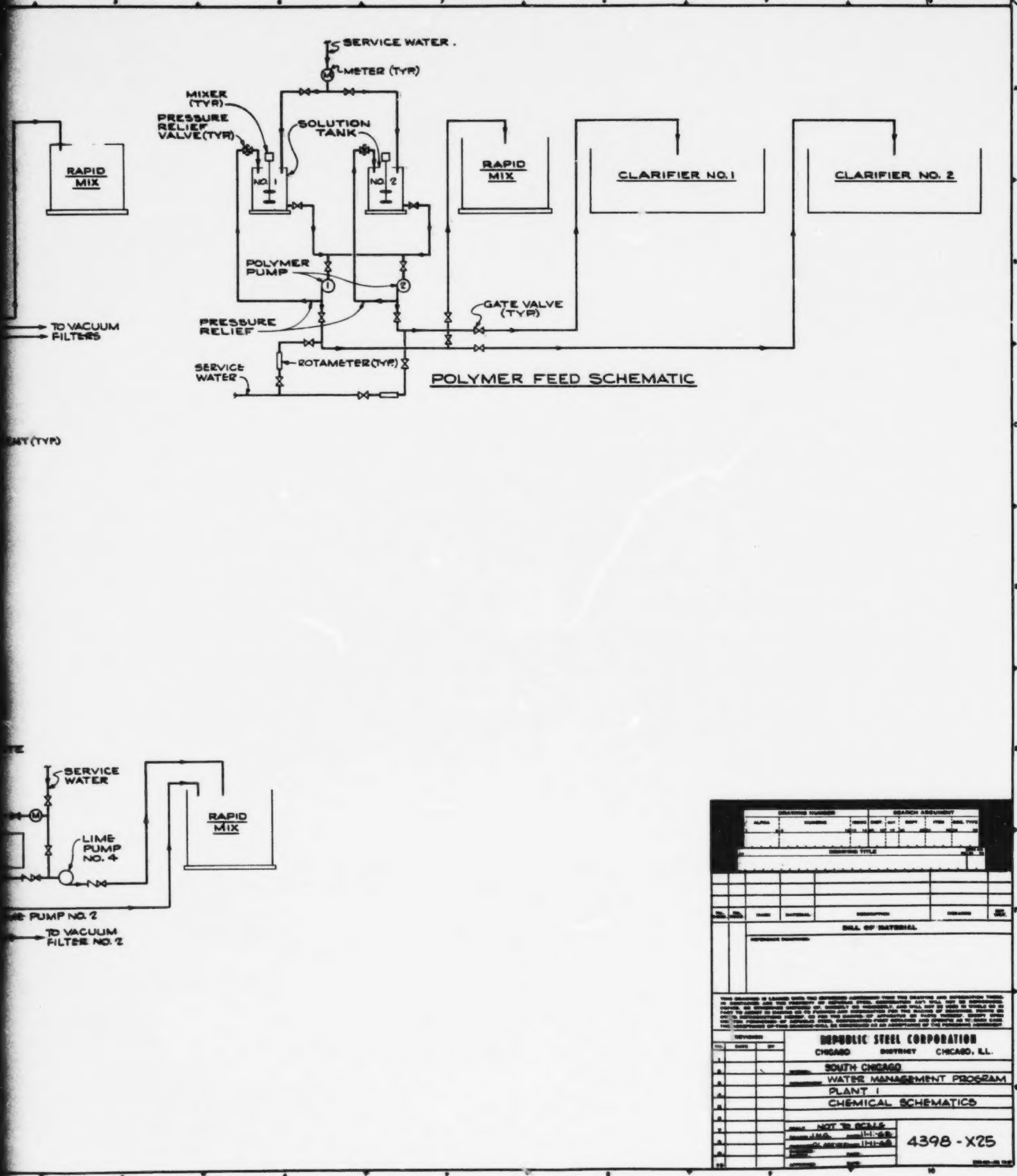


FERRIC CHLORIDE FEED SCHEMATIC





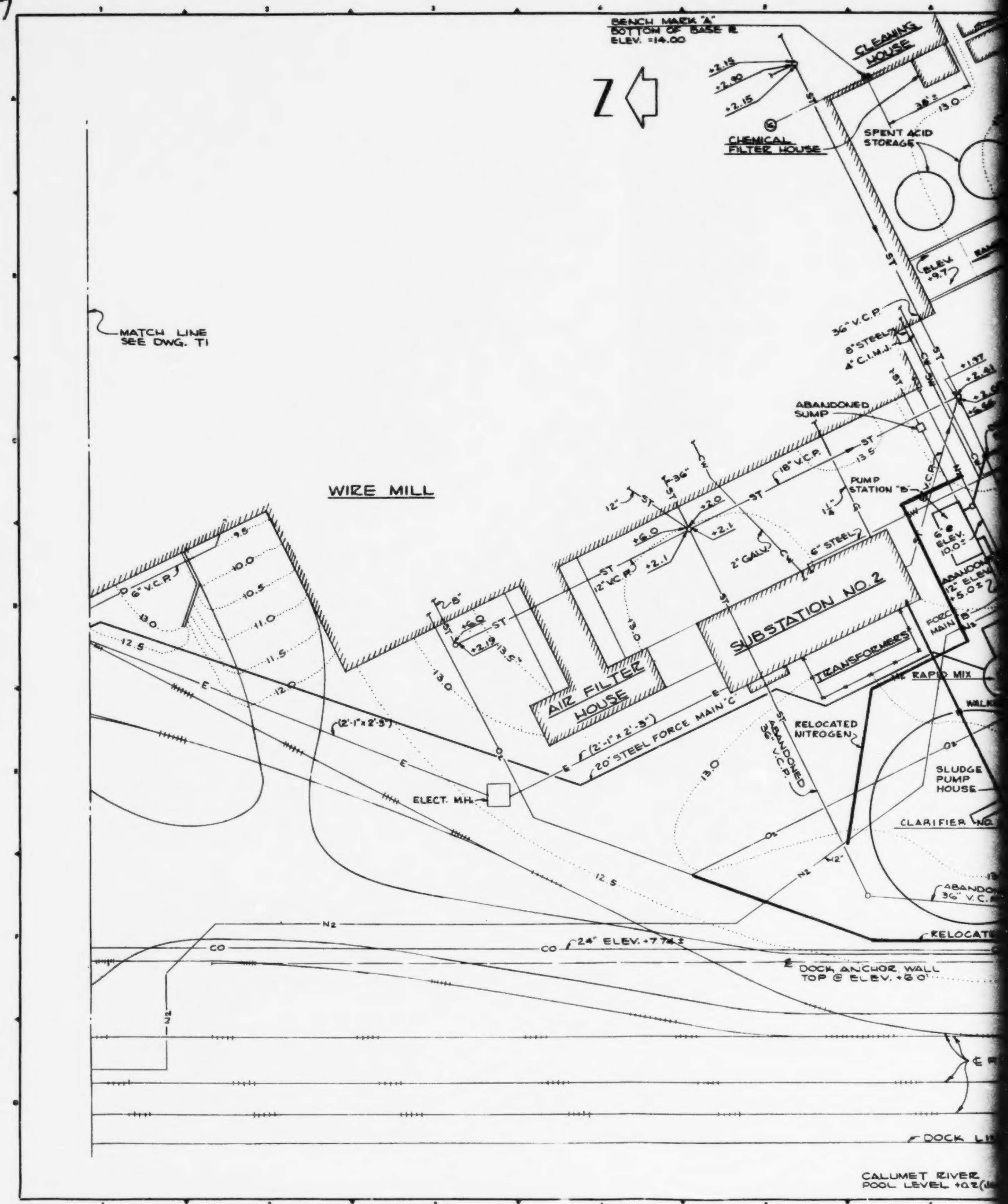
LIME FEED SCHEMATIC



POLYMER FEED SCHEMATIC

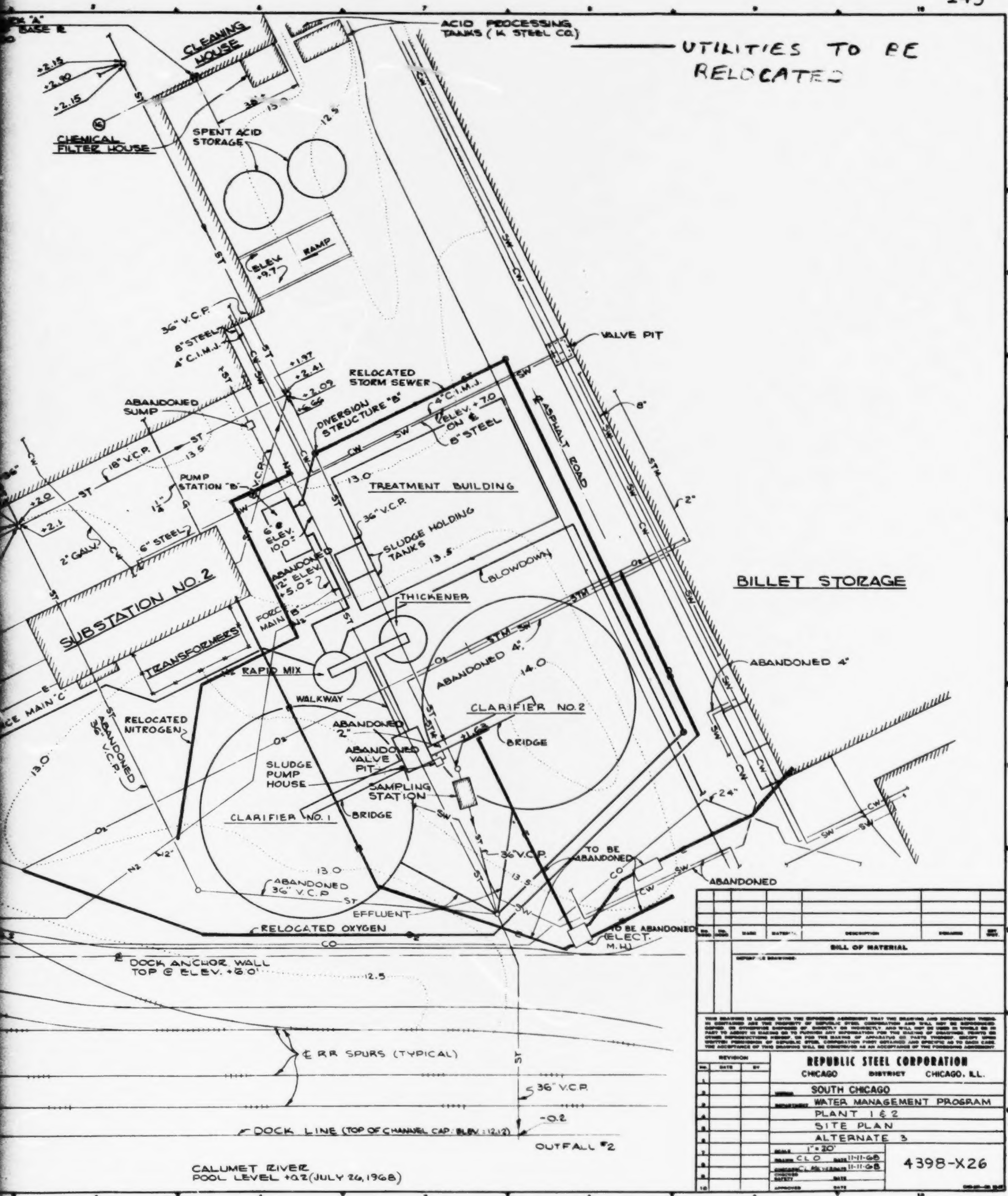
REPUBLIC STEEL CORPORATION
CHICAGO DISTRICT CHICAGO, ILL.
SOUTH CHICAGO
WATER MANAGEMENT PROGRAM
PLANT 1
CHEMICAL SCHEMATICS
NOT TO SCALE
JMG 11-1-68
11-1-68
4398 - X25

A


BENCH MARK "A"
BOTTOM OF BASE ℞
ELEV. =14.00
N
CLEANING HOUSE
+2.15
+2.90
+2.15
ST
CHEMICAL FILTER HOUSE
SPENT ACID STORAGE
13.0
ELEV. +9.7
MATCH LINE
SEE DWG. T1
36" V.C.P.
8" STEEL
4" C.I.M.J.
+1.97
+2.41
ABANDONED SUMP
18" V.C.P.
13.5
PUMP STATION "B"
WIRE MILL
12"
36"
+2.0
+2.1
+6.0
+2.1
2" GALV.
6" STEEL
6" ELEV. 10.0±
ABANDONED 12" ELEV. +5.0±
FORCE MAIN "B"
6" V.C.P.
9.5
10.0
10.5
11.0
11.5
12.0
13.0
12.5
8"
+6.0
+2.19
13.5
12" V.C.P.
SUBSTATION NO. 2
TRANSFORMERS
AIR FILTER HOUSE
RAPID MIX
(2'-1" x 2'-3")
20" STEEL FORCE MAIN "C"
E
ELECT. M.H.
ABANDONED 36" V.C.P.
RELOCATED NITROGEN
SLUDGE PUMP HOUSE
CLARIFIER NO.
ABANDONED 36" V.C.
N2
12"
CO
24" ELEV. +7.74±
RELOCATED
DOCK ANCHOR WALL
TOP @ ELEV. +6.0'
℄
DOCK LI
CALUMET RIVER
POOL LEVEL +0.2

C

UTILITIES TO BE RELOCATED



BILL OF MATERIAL

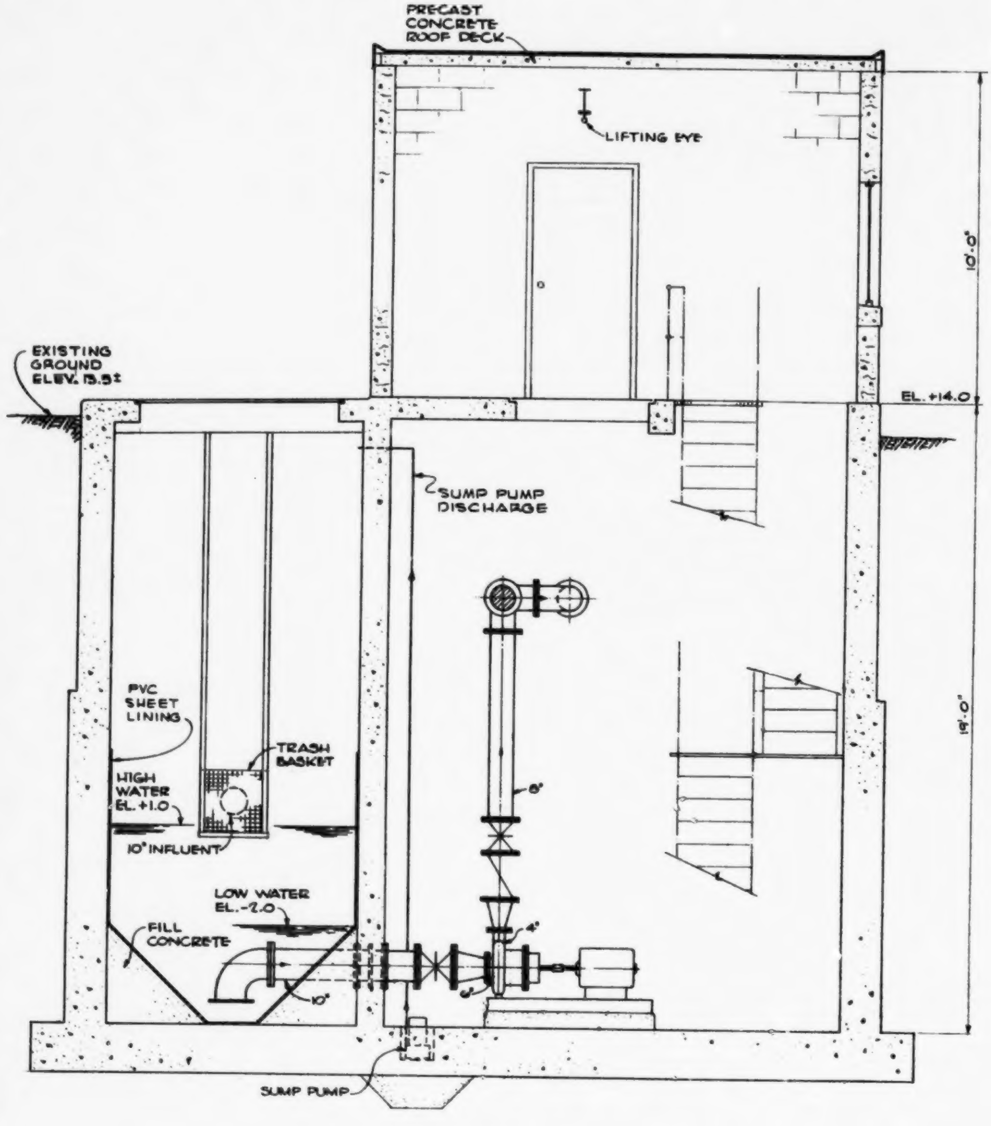
REPUBLIC STEEL CORPORATION
CHICAGO DISTRICT CHICAGO, ILL.

SOUTH CHICAGO
WATER MANAGEMENT PROGRAM
PLANT 1 & 2
SITE PLAN
ALTERNATE 3

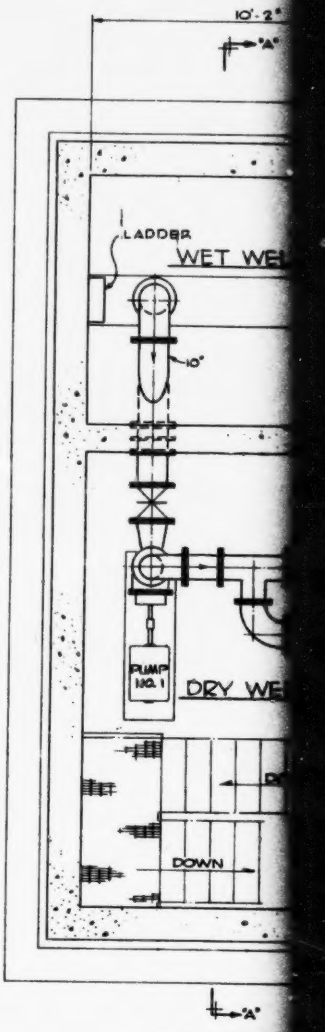
SCALE 1" = 20'
DRAWN CLO DATE 11-11-68
CHECKED C.L. McVeagh DATE 11-11-68

4398-X26

A

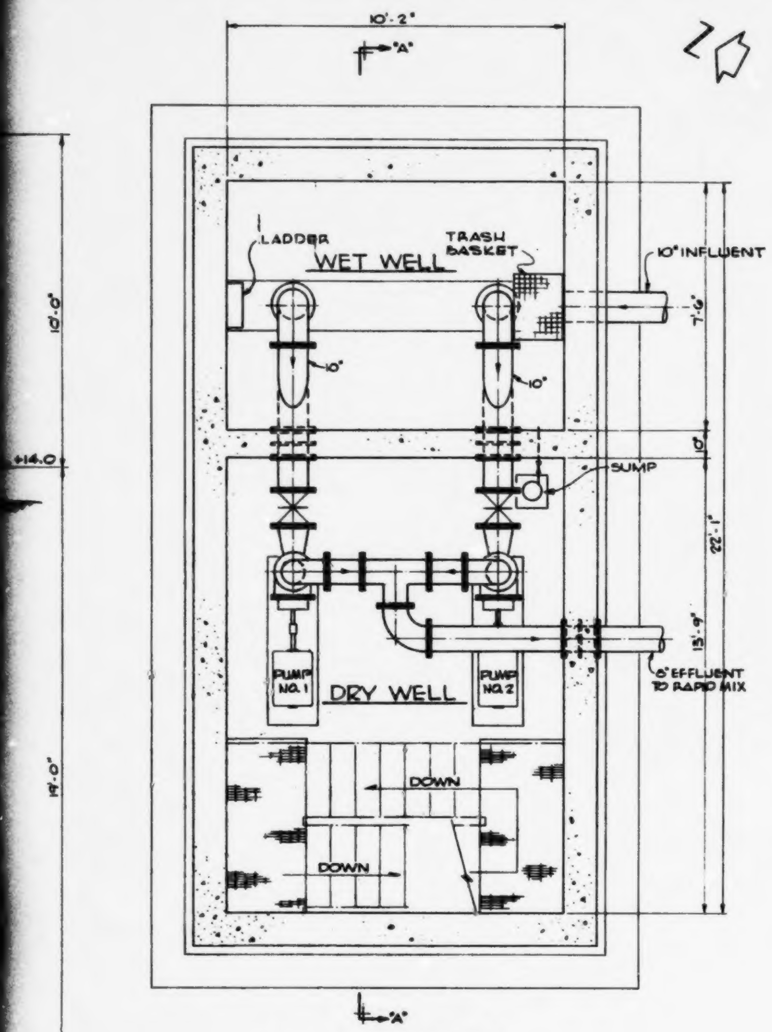


SECTION "A"
DWG.
SCALE : 1/2"=1'-0"

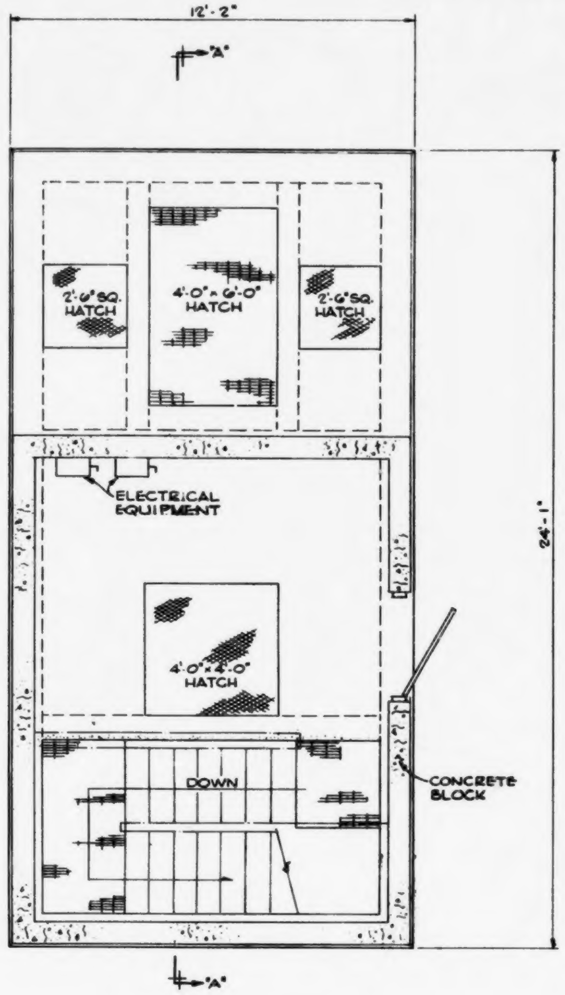


PLAN SECT

B



PLAN SECTION



FLOOR PLAN

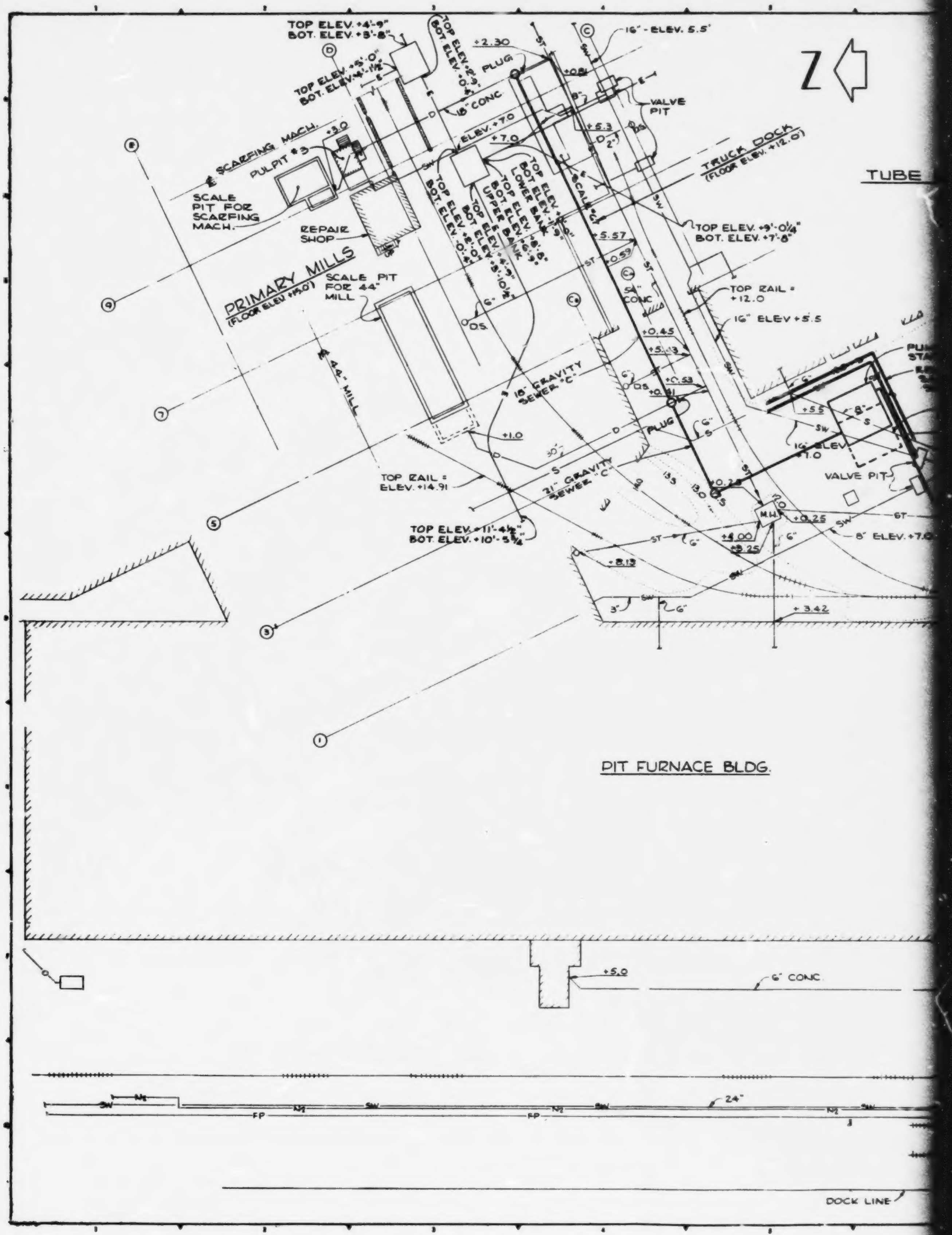
BILL OF MATERIAL

REVISION

REPUBLIC STEEL CORPORATION
CHICAGO DISTRICT CHICAGO, ILL.
SOUTH CHICAGO
PRELIMINARY LAYOUT
PUMP STATION "B"
1/2" : 1'-0"
j.b.p. 11/15/68
C.L.M. 11/15/68
4398 - X23

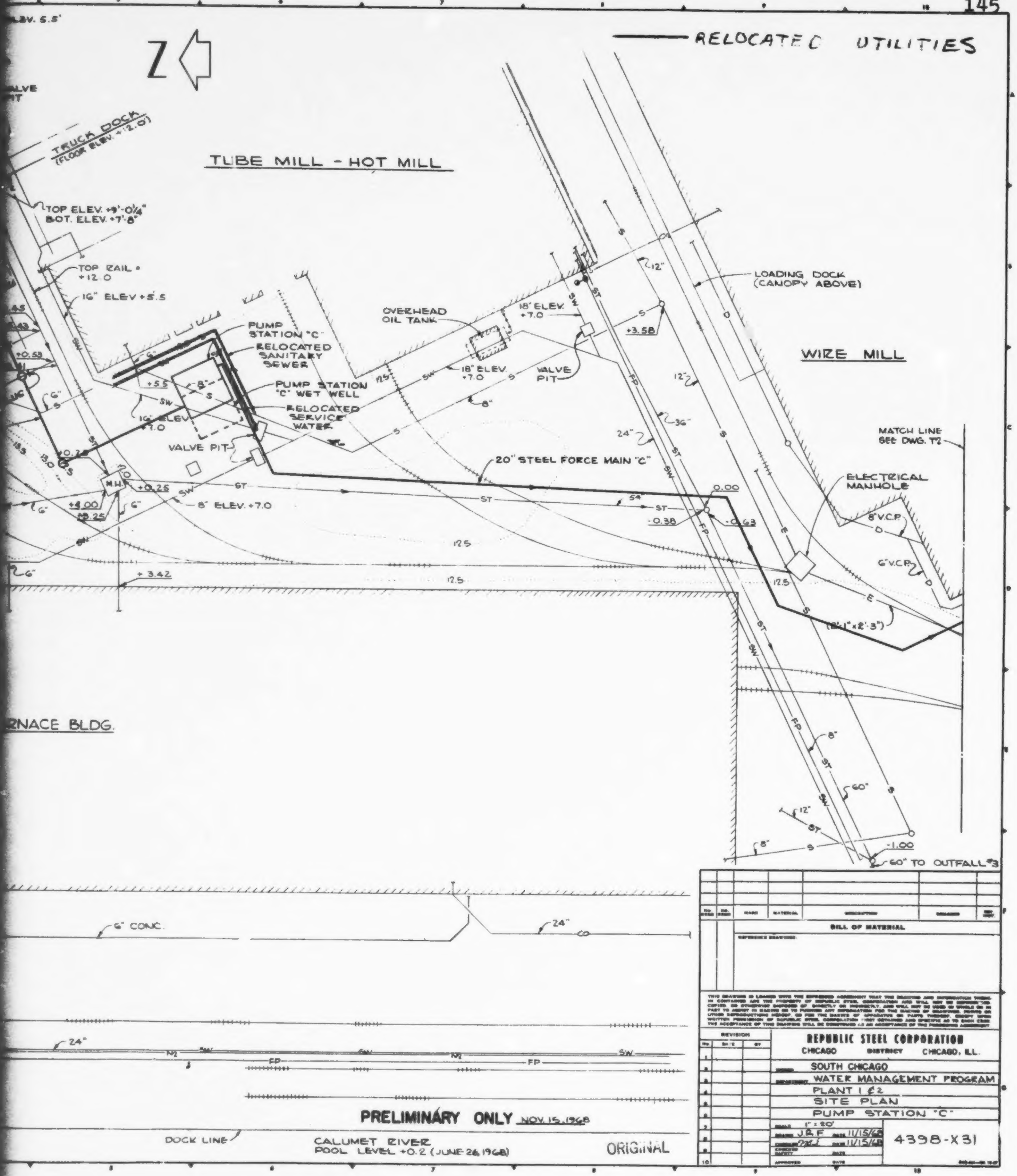
ORIGINAL

A



TOP ELEV. +4'-9"
BOT. ELEV. +3'-8"
TOP ELEV. +5'-0"
BOT. ELEV. +4'-1½"
TOP ELEV. +2'-3"
BOT. ELEV. +0'-3"
16" - ELEV. 5.5'
+2.30
PLUG
+0.81
18" CONC.
VALVE PIT
Z
ELEV. +7.0
+7.0
+5.3
SCARFING MACH.
+3.0
PULPIT #3
SCALE PIT FOR SCARFING MACH.
REPAIR SHOP
TOP ELEV. +8'-0"
BOT. ELEV. +0'-6"
TOP ELEV. +4'-3"
BOT. ELEV. +3'-10½"
TOP ELEV. +6'-0"
BOT. ELEV.
LOWER BANK
UPPER BANK
SCALE
TRUCK DOCK
(FLOOR ELEV. +12.0')
TUBE
TOP ELEV. +9'-0¼"
BOT. ELEV. +7'-8"
PRIMARY MILLS
(FLOOR ELEV. +15.0')
SCALE PIT FOR 44" MILL
5.57
+0.57
SW CONC.
TOP RAIL = +12.0
16" ELEV +5.5
D.S.
44" MILL
+0.45
+5.13
+0.53
+0.81
18" GRAVITY SEWER "C"
PLUG
+1.0
+5.5
8"
16" ELEV +7.0
VALVE PIT
30"
TOP RAIL = ELEV. +14.91
21" GRAVITY SEWER "C"
13.5
13.0
+0.23
M.H.
+0.25
8" ELEV. +7.0
TOP ELEV. +11'-4½"
BOT. ELEV. +10'-5¾"
+8.13
+4.00
+3.25
3"
6"
+3.42
PIT FURNACE BLDG.
+5.0
6" CONC.
24"
SW
FP
N2
DOCK LINE
1
2
3
4
5

B



PRELIMINARY ONLY NOV. 15, 1968

BILL OF MATERIAL

REFERENCE DRAWINGS

REVISION

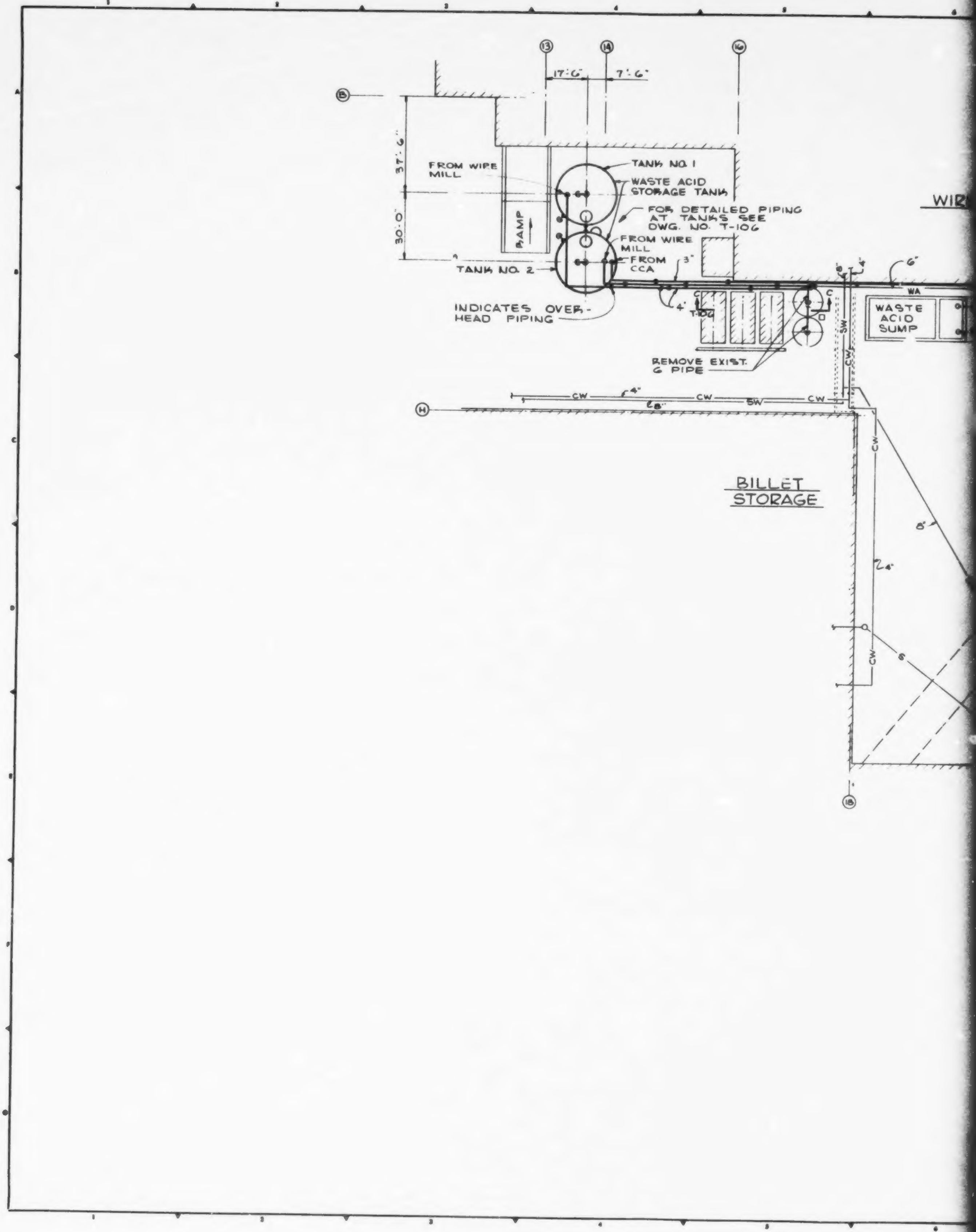
REPUBLIC STEEL CORPORATION
CHICAGO DISTRICT CHICAGO, ILL.

SOUTH CHICAGO
WATER MANAGEMENT PROGRAM
PLANT 1 & 2
SITE PLAN
PUMP STATION "C"

SCALE 1" = 20'
DRAWN J.R.F. DATE 11/15/68
CHECKED DATE 11/15/68
CHECKED SAFETY DATE
APPROVED DATE

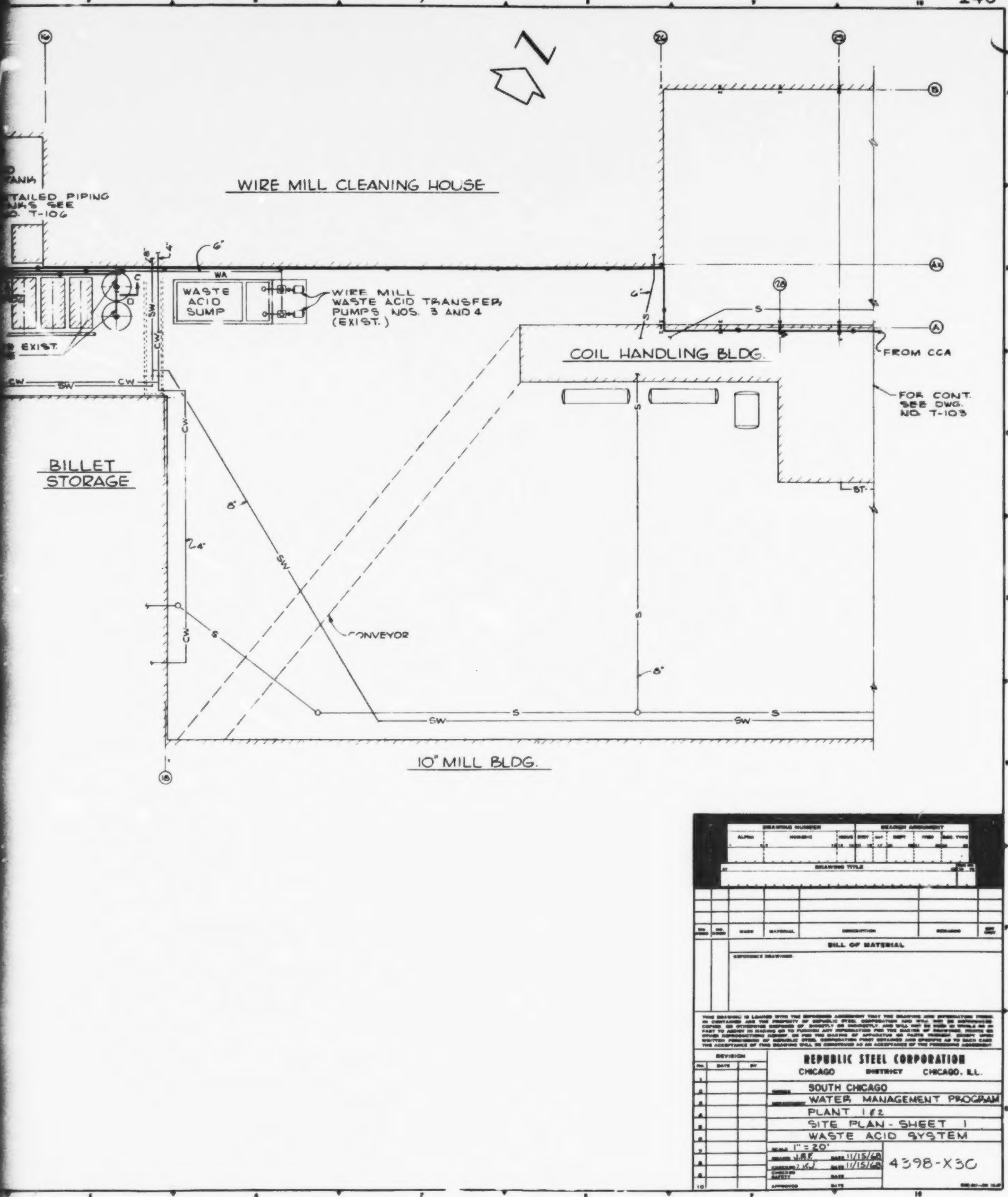
4398-X31

A



13
14
16
B
H
18
17'-6"
7'-6"
37'-6"
30'-0"
FROM WIRE MILL
TANK NO. 1
WASTE ACID STORAGE TANK
FOR DETAILED PIPING AT TANKS SEE DWG. NO. T-106
RAMP
FROM WIRE MILL
FROM CCA
TANK NO. 2
3"
4"
6"
8"
WA
C
T-106
INDICATES OVERHEAD PIPING
WASTE ACID SUMP
SW
CW
REMOVE EXIST. 6 PIPE
CW
4"
8"
SW
WIR
BILLET STORAGE
8"
24"
6

B



BILL OF MATERIAL

REPUBLIC STEEL CORPORATION
CHICAGO DISTRICT CHICAGO, ILL.

SOUTH CHICAGO
WATER MANAGEMENT PROGRAM
PLANT 1 & 2
SITE PLAN - SHEET 1
WASTE ACID SYSTEM

SCALE 1" = 20'
DRAWN J.B.F. DATE 11/15/68
CHECKED ?.K.J. DATE 11/15/68
CHECKED SAFETY DATE
APPROVED DATE

4398-X30

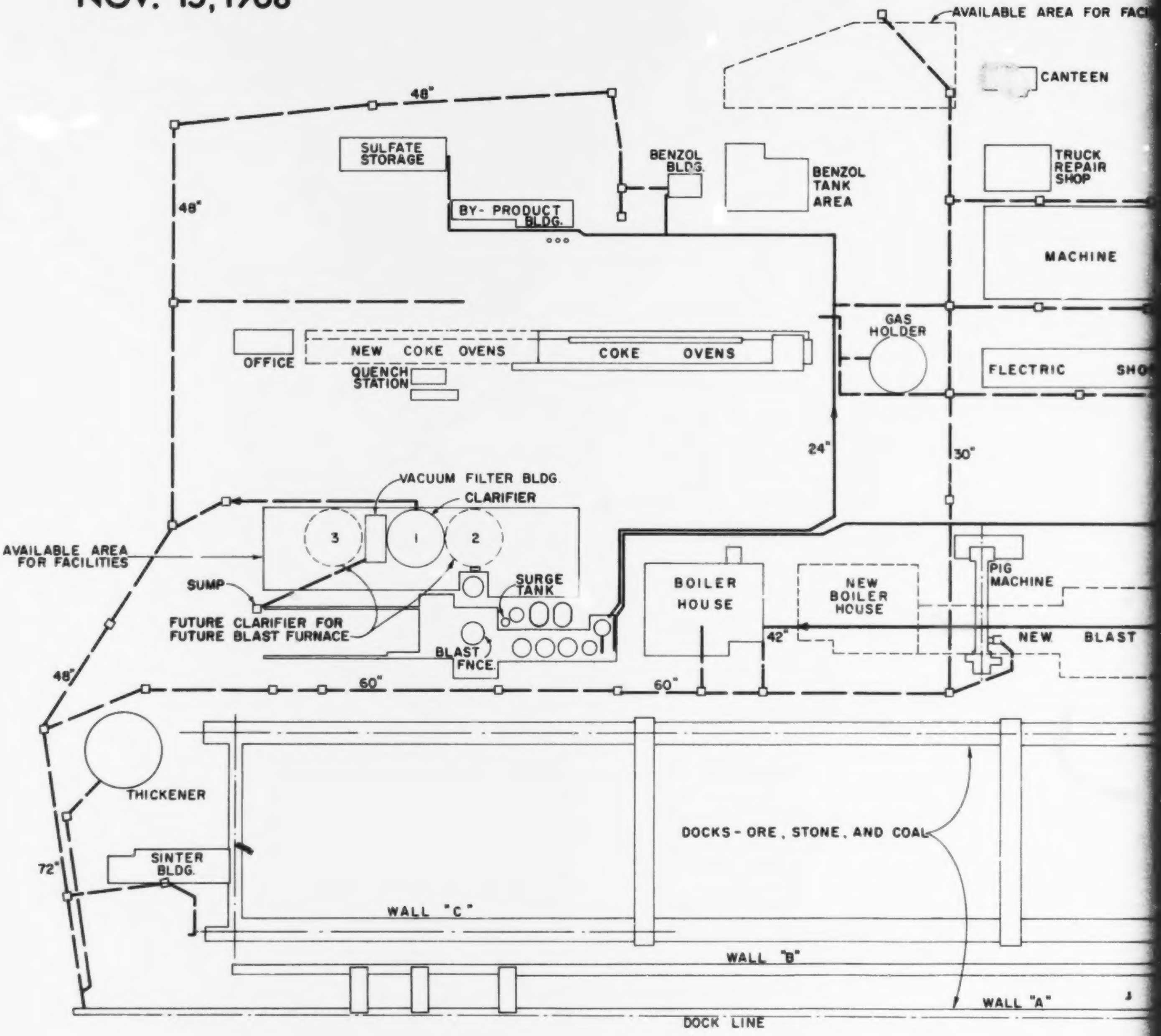
A

REPUBLIC STEEL CORPORATION

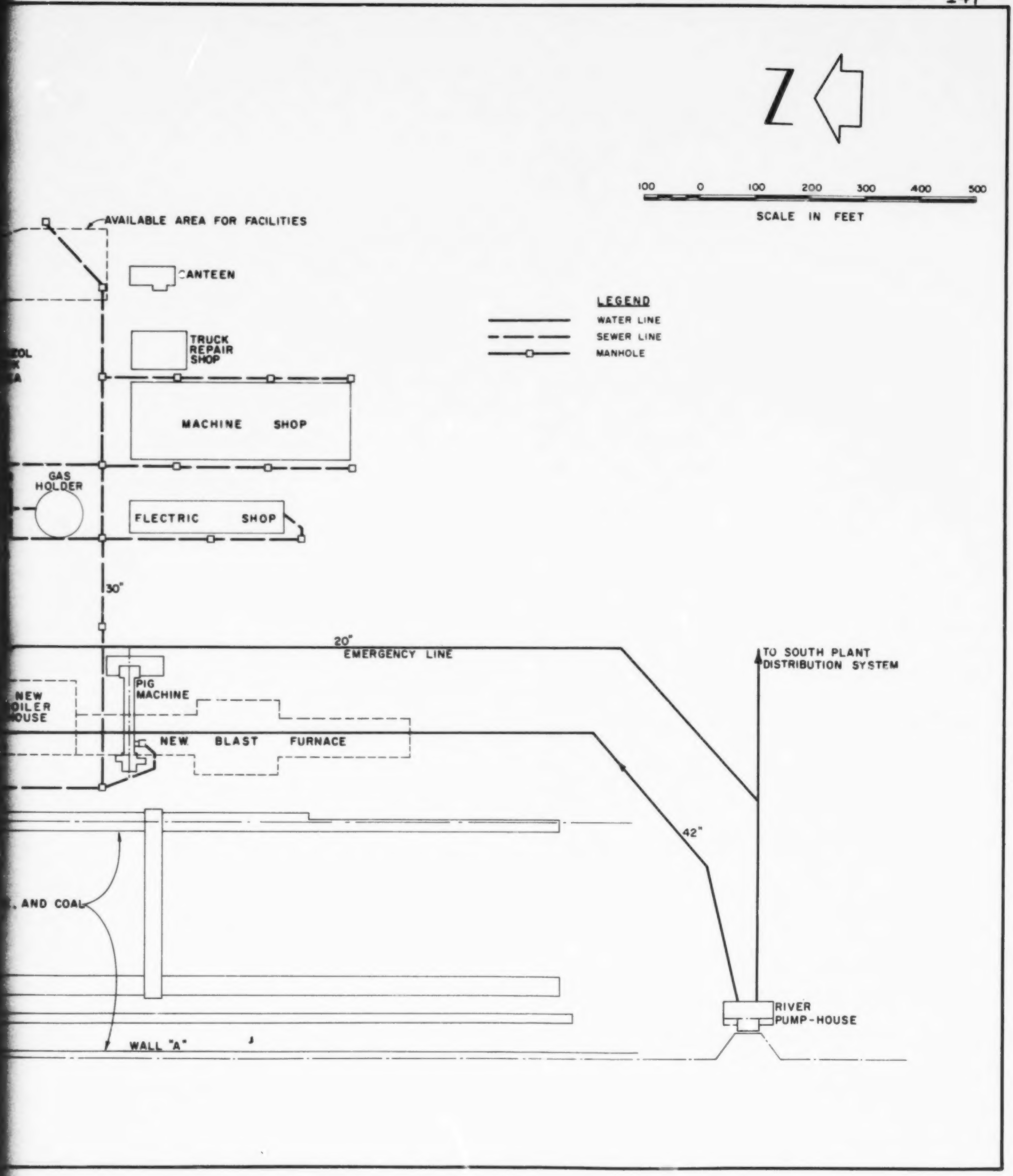
CHICAGO DISTRICT

PLANT 3

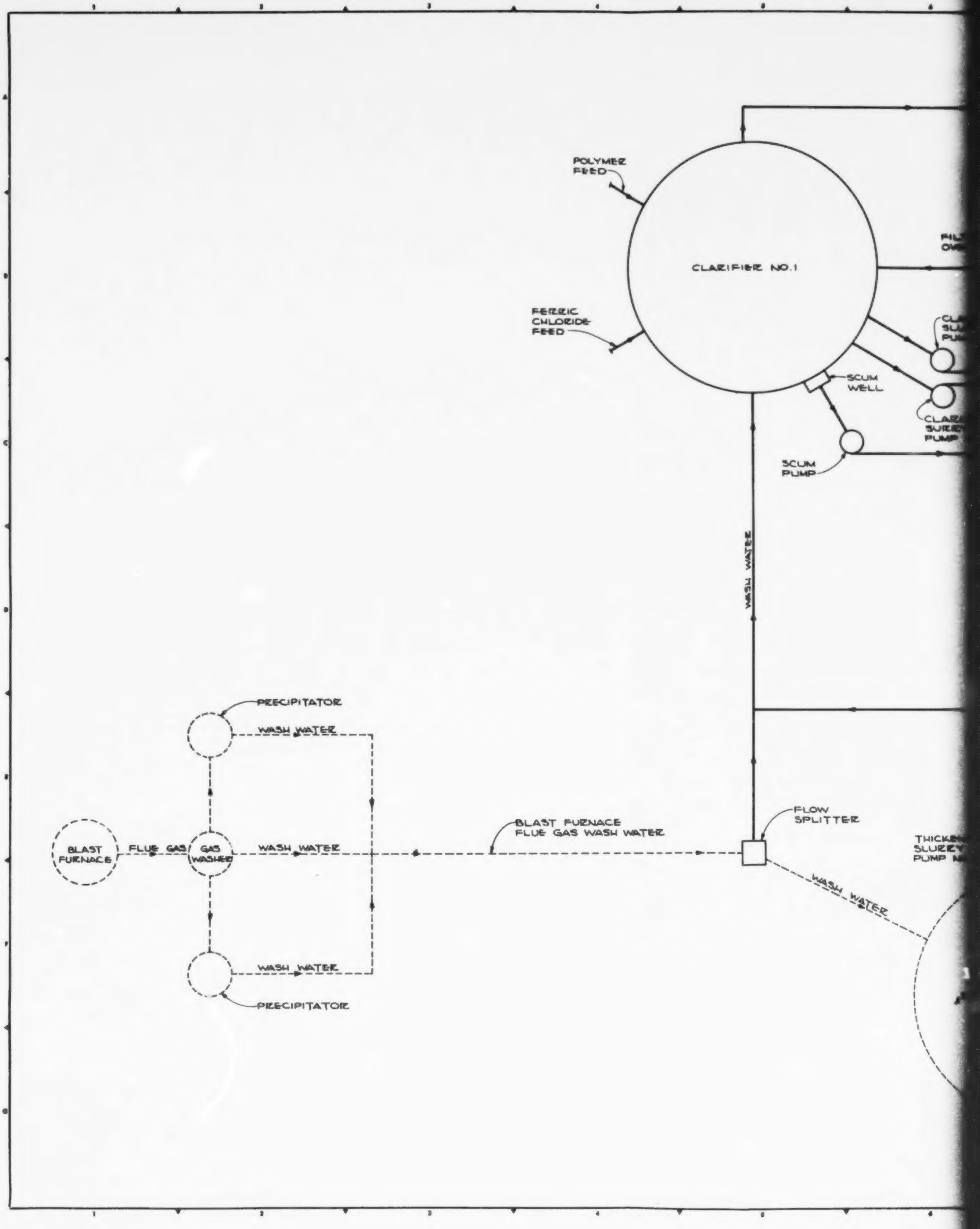
NOV. 15, 1968



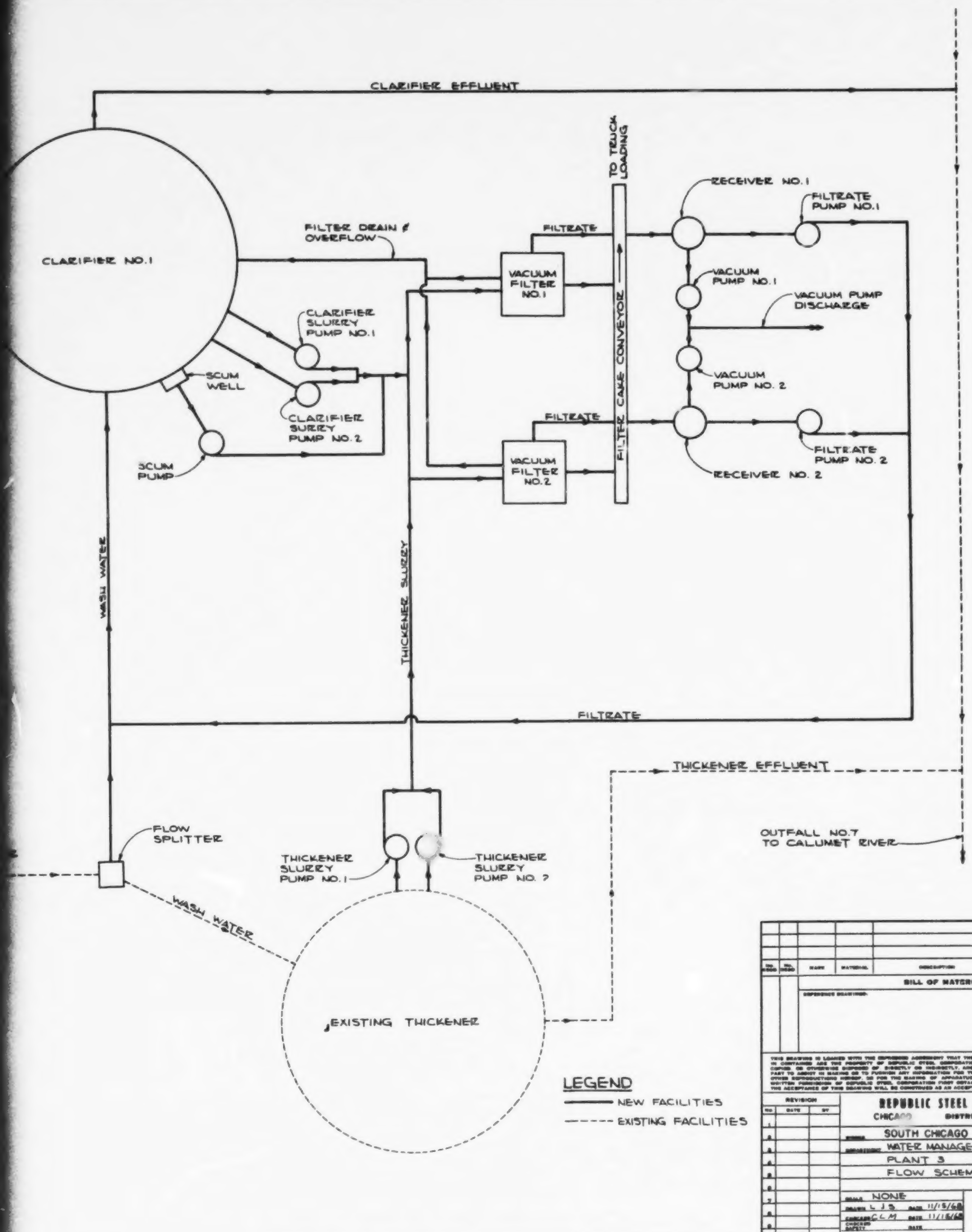
B 147


N
100 0 100 200 300 400 500
SCALE IN FEET
AVAILABLE AREA FOR FACILITIES
CANTEEN
LEGEND
WATER LINE
SEWER LINE
MANHOLE
TRUCK REPAIR SHOP
ZOL
K
A
MACHINE SHOP
GAS HOLDER
ELECTRIC SHOP
30"
20"
EMERGENCY LINE
TO SOUTH PLANT DISTRIBUTION SYSTEM
PIG MACHINE
NEW
OILER
HOUSE
NEW BLAST FURNACE
42"
, AND COAL
RIVER PUMP-HOUSE
WALL "A"

A


POLYMER FEED
CLARIFIER NO.1
FERRIC CHLORIDE FEED
FIL
OV
CLA
SLU
PU
SCUM WELL
CLAR
SURR
PUMP
SCUM PUMP
WASH WATER
PRECIPITATOR
WASH WATER
BLAST FURNACE
FLUE GAS
GAS WASHER
WASH WATER
BLAST FURNACE FLUE GAS WASH WATER
FLOW SPLITTER
THICKE
SLURRY
PUMP N
WASH WATER
WASH WATER
PRECIPITATOR
1
2
3
4
5
6

B



BILL OF MATERIAL

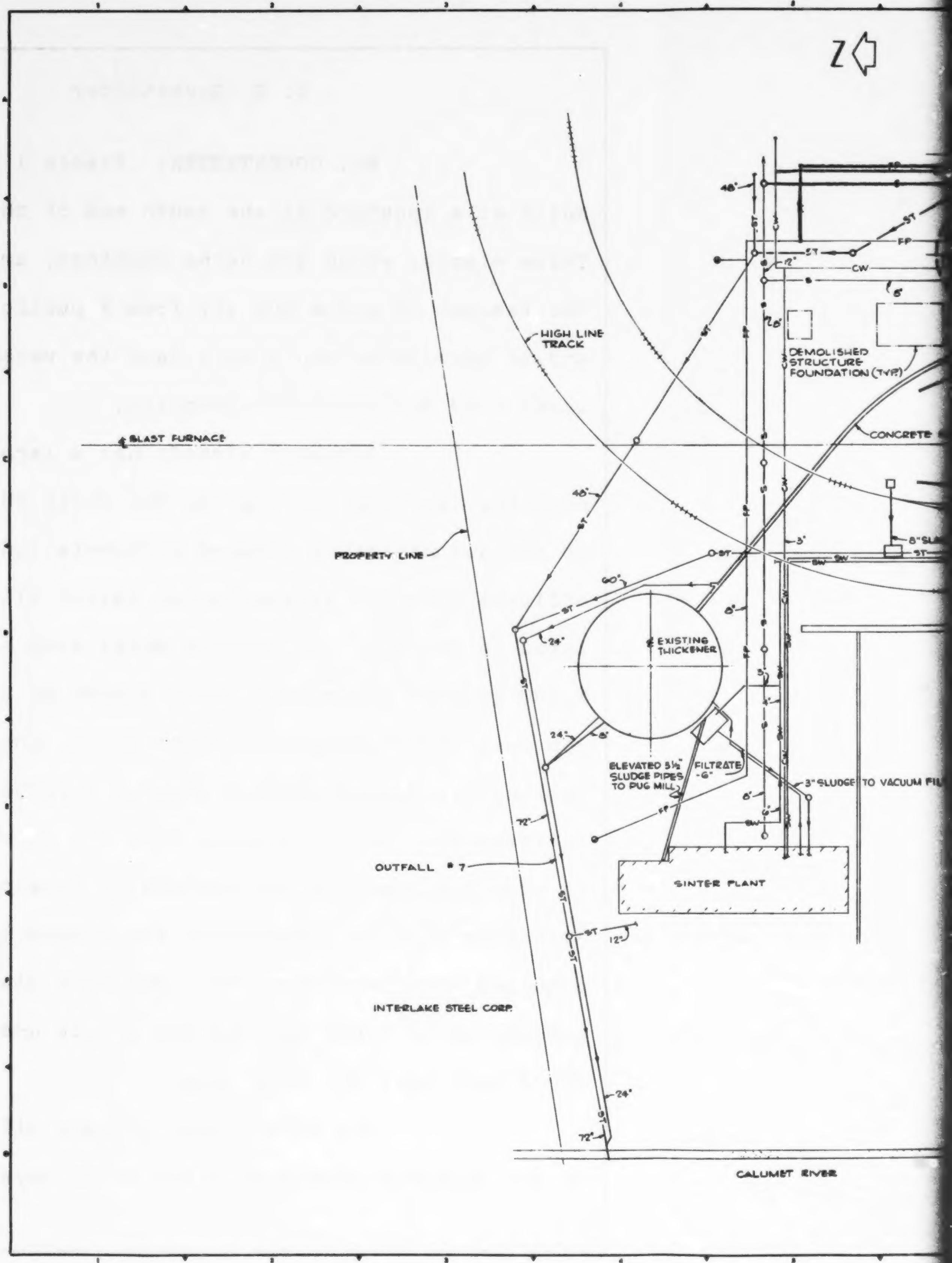
THIS DRAWING IS LOANED WITH THE EXPRESSED AGREEMENT THAT THE DRAWING AND INFORMATION THEREIN CONTAINED ARE THE PROPERTY OF REPUBLIC STEEL CORPORATION AND WILL NOT BE REPRODUCED, COPIED, OR OTHERWISE DISPOSED OF, DIRECTLY OR INDIRECTLY, AND WILL NOT BE USED IN WHOLE OR IN PART TO ASSIST IN MAKING OR TO FURNISH ANY INFORMATION FOR THE MAKING OF DRAWINGS, PRINTS OR OTHER REPRODUCTIONS HEREOF, OR FOR THE MAKING OF APPARATUS OR PARTS THEREOF, EXCEPT UPON WRITTEN PERMISSION OF REPUBLIC STEEL CORPORATION FIRST OBTAINED AND SPECIFIC AS TO EACH CASE. THE ACCEPTANCE OF THIS DRAWING WILL BE CONSTRUED AS AN ACCEPTANCE OF THE FOREGOING AGREEMENT.

REPUBLIC STEEL CORPORATION
CHICAGO DISTRICT CHICAGO, ILL.
SOUTH CHICAGO
WATER MANAGEMENT PROGRAM
PLANT 3
FLOW SCHEMATIC

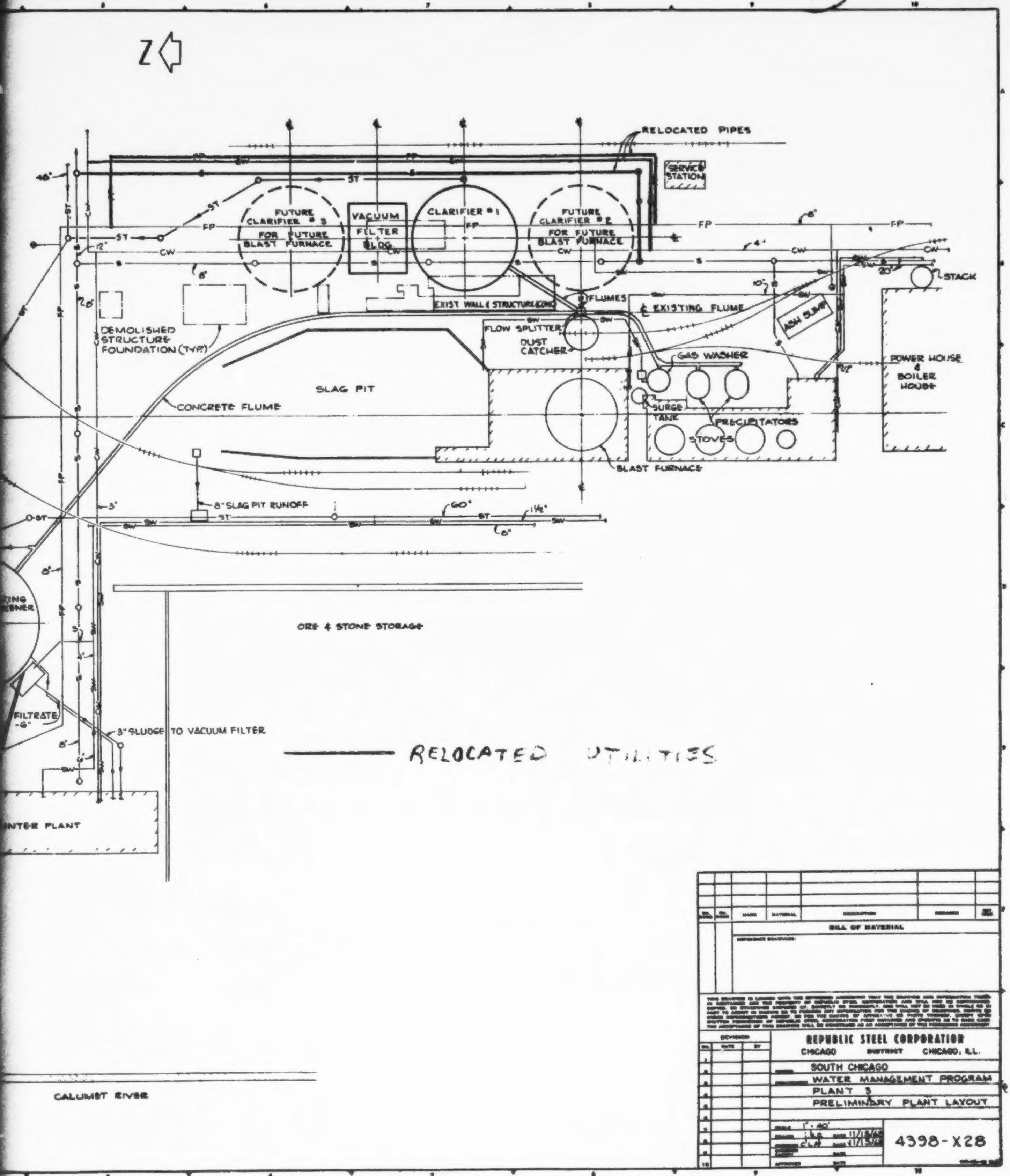
SCALE NONE
DRAWN L J S DATE 11/15/68
CHECKED C L M DATE 11/15/68
CHECKED SAFETY DATE
APPROVED DATE

4398-X32

A


Z
HIGH LINE TRACK
BLAST FURNACE
PROPERTY LINE
DEMOLISHED STRUCTURE FOUNDATION (TYP.)
CONCRETE
EXISTING THICKENER
ELEVATED 5½" SLUDGE PIPES TO PUG MILL
FILTRATE -6"
3" SLUDGE TO VACUUM FIL
8" SLA
OUTFALL #7
SINTER PLANT
INTERLAKE STEEL CORP.
CALUMET RIVER
48"
60"
24"
72"
12"
8"
6"
3"
ST
FP
CW
SW

B



REPUBLIC STEEL CORPORATION
CHICAGO DISTRICT CHICAGO, ILL.
SOUTH CHICAGO
WATER MANAGEMENT PROGRAM
PLANT 3
PRELIMINARY PLANT LAYOUT
1" = 40'
4398-X28

MR. GOCKSTETTER: Plants 1 and 2 are being built at a location at the south end of the steel plant. These plants, which are being combined, are designed for the removal of scale and oil from Republic's hot mills and to neutralize and precipitate the metals in the rinse water from the pickling operation.

Republic already has a large primary settling facility serving the bar mills which consists of two automatically cleaned sedimentation basins. The effluent from the sedimentation basins will be recirculated to the mill for service water with approximately 1,300 gallons per minute being pumped as blowdown to the new combined terminal treatment plant. Another 1,100 gallons per minute pumping station will be constructed to intercept the rinse water from the pickling process. In addition, part of the wastewater from the steel mill operation will be intercepted and pumped to the new combined treatment facility. The pump station will have a capacity of 6,600 gallons per minute and a 20-inch force main some 820 feet long.

All these waste streams will be directed to the combined treatment plant whose capacity will be

G. J. Gockstetter

9,000 gallons per minute or 12,960,000 gallons per day. The combined treatment plant would serve a population in excess of 100,000 people or a town the size of Springfield, Illinois, or Peoria. The wastes will be conveyed to a rapid mix tank where lime and other coagulant aids will be added. The waste will then flow to flocculator-clarifiers ninety feet in diameter, two of them which are shown here in this picture.

The clear effluent will overflow a peripheral weir and be discharged to the river. The settled solids or sludge will be thickened and then dried by vacuum filters.

Plant #3 is being located to serve the north end of the steel plant. This has a single clarifier unit. The wastes to be treated here are solids originating from the gas cleaning operation at the blast furnace and certain other solids generated in this area. The existing facilities for treating these wastes are a traveling screen, a clarifier-thickener, and associated pumps and equipment including vacuum filters for drying the sludge.

The volume of wastewater to be processed at Plant #3 is approximately 3,700 gallons per minute or 5,320,000 gallons per day. The treatment provided by the new plant will be flocculation-clarification. The new clarifier-thickener will be eighty feet in diameter and fourteen feet deep.

A new control building is being constructed to house the chemical feed equipment and vacuum filters for dewatering the sludge.

In addition to these terminal treatment facilities, we are adding additional storage and collection facilities for pickle liquor, which will be constructed as part of the current program. This involves the installation of five acid resistant pumping stations to collect acid at all locations and the installation of an additional 150,000 gallons of acid resistant storage. This system will make it possible to continue off-site disposal or to use the spent pickle liquor as a coagulant in the treatment plants.

As indicated by the CPM diagram, these facilities are to be completed by December 31, 1970. These plants are large and complex facilities which require considerable time for procurement, engineering and construction. The location of these plants in a congested operating area along with relocating underground facilities and the placement of foundations on slag filled land requires this time schedule. Passing through these plant sites are railroad tracks and plant roads for truck shipment which must be maintained in operation. Numerous underground utilities such as fire lines, city and service water lines, oxygen, coke gas and nitrogen lines, sanitary sewers and electrical conduits have all required relocating.

On April 11, 1969, groundbreaking ceremonies for this water treatment complex were held marking the formal beginning of actual construction of these new facilities. We were privileged to have as our guests at these ceremonies a number of persons representing various governmental agencies and political bodies.

Republic is currently on time with the schedules set forth in the CPM diagram. I would like to submit copies of reports which have been submitted by Republic to the Metropolitan Sanitary District of Greater Chicago which show Republic's progress in carrying out this program. These are included in the brochure, gentlemen, which consist of letters which were reports made by ourselves to the District and Sanitary Water Board.

(Which said letters are as follows:)

[REPUBLIC]

REPUBLIC STEEL CORPORATION

GENERAL OFFICES REPUBLIC BUILDING, CLEVELAND, OHIO

G. J. GOCKSTETTER
SUP'T FUEL POWER,
AIR AND WATER MANAGEMENT

CHICAGO DISTRICT
116TH STREET & BURLEY AVENUE
CHICAGO, ILLINOIS 60617

March 28, 1969

Mr. Forrest Neil, Acting Chief Engineer
Metropolitan Sanitary District
of Greater Chicago
100 East Erie Street
Chicago, Illinois 60611

Progress Report

Dear Sir:

This progress report is being made in accordance with (b) paragraph 12 of the Stipulation between the Metropolitan Sanitary District and Republic Steel Corporation dated February 13, 1969. The report is based on the CPM Diagram (rev. 4) submitted with a letter addressed to Vinton W. Bacon dated December 6, 1968 along with other attachments.

Plant 1 & 2

Waste Acid System and Coil Anneal (CCA)

Electrical design -	Preliminary complete	12-19-68
	Final complete	3-26-69
Mechanical design -	Preliminary complete	12-17-68
	Final complete	3-10-69
Structural design -	Preliminary complete	12-19-68
	Final complete	3-17-69
Prepare general construction specifications review and approval		3-24-69
Out to contractors for bids		4-1-69

Scarfing Area, Pumping Station and Pipe Line

Electrical design -	Preliminary complete	1-7-69
	Final complete	3-17-69
Mechanical design -	Preliminary complete	1-10-69
	Final complete	3-17-69
Structural design -	Preliminary complete	1-15-69
	Final complete	3-16-69
General construction specifications	Out for bids	4-1-69

#2 Pumping Station, Clarifier & Filter Building

Electrical design -	Preliminary complete	1-20-69
	Final complete	3-20-69
Mechanical design -	Preliminary complete	1-30-69
	Final complete	3-20-69
Structural design -	Preliminary complete	1-28-69
	Final complete	4-1-69
General construction specifications	Out for bids	4-1-69

Prepare Equipment Specifications for Pumps, Clarifiers, Etc.

Specifications issued		12-1-68
Evaluate bids		2-25-69
Orders placed for clarifiers, filters, rapid mix, etc.		3-24-69
General construction specifications	Out for bids	4-1-69

Preliminary Mechanical Design Outfall #1 Area

All preliminary drawings - complete	2-4-69
Electrical design - final	3-10-69
Mechanical design - final	3-13-69
Arch. and structural design - final	3-13-69

Prepare general construction specifications review and approval - out for bids	3-15-69
Order placed - Ed Gray	3-27-69

Plant #3

Prepare general construction specifications - complete	4-1-69
Electrical design - Preliminary complete	3-4-69
Final complete	4-1-69
Mechanical design - Preliminary complete	2-26-69
Final complete	4-1-69
Structural design - Preliminary complete	3-7-69
Final complete	4-1-69

Clarifier Equipment and Filters

Specifications written	12-1-68
Bids evaluated	2-25-69
Orders placed	3-24-69

A comparison of the foregoing dates with those shown on the CPM Diagram (rev. 4) shows that we are on schedule in all phases of the project. Should any additional information be required, we will gladly supply same upon request.

Yours truly,

G. J. Gockstetter
Supt., Fuel-Power-Air & Water
Management

cc: E. Knight - MSD
C. Klassen - SWB

GJG/slo

bcc: R. P. Carpenter
A. A. Kappenhagen
R. W. Engelbert
L. F. Birkel
J. W. Mills

REPUBLIC STEEL CORPORATION

June 2, 1969

Mr. Forrest Neil, Acting Chief Engineer
Metropolitan Sanitary District
of Greater Chicago
100 East Erie Street
Chicago, Illinois 60611

Progress Report

Dear Sir:

This progress report is being made in accordance with (b) paragraph 12 of the Stipulation between the Metropolitan Sanitary District and Republic Steel Corporation dated February 13, 1969. This report is based on the CPM diagram (rev 4) submitted with a letter to Vinton W. Bacon dated December 6, 1968 along with other attachments.

Plants #1, # 2 and # 3

Construction of the diversion sewers at plants #1 and #2 along with the revisions to the flume at the #3 plant, started on April 1, 1969 is now complete.

Proposals from contractors have been received and evaluated. Our recommendations will be submitted to the Republic Steel Purchasing Department this week and a contract negotiated with the successful bidder the week of June 15, 1969.

Mr. Forrest Neil, Acting Chief Engineer
Metropolitan Sanitary District
of Greater Chicago
100 East Erie Street
Chicago, Illinois 60611
Page -2-

June 2, 1969

Attached herewith are copies of the following purchase orders numbered.

H-91505-62
H-91522-62
H-91612-62
H-91100-26
H-91162-26

This confirms our report dated March 28, 1969 which included the purchase of the Clarifiers, vacuum filters, electrical equipment etc. for the three waste water treatment plants.

Yours truly,

G. J. Gockstetter
Supt; Fuel-Power-Air & Water
Management

Enclo.

cc: E. Knight MSD
C. Klassen SWB

GJG/js

bcc: R. P. Carpenter
A. A. Kappenhagen
R. W. Engelbert
L. F. Birkel
J. W. Mills

REPUBLIC STEEL CORPORATION

GENERAL OFFICES REPUBLIC BUILDING. CLEVELAND. OHIO

G. J. GOCKSTETTER
SUP'T FUEL. POWER.
AIR AND WATER MANAGEMENT

CHICAGO DISTRICT
116TH STREET & BURLEY AVENUE
CHICAGO, ILLINOIS 60617

June 26, 1969

Franklin D. Yoder M.D. M.P.H.
State of Illinois Sanitary Water Board
Springfield, Illinois 62706

Dear Sir:

In compliance with the request of the Sanitary Water Board in their letter to you dated March 10, 1969, the last sentence of the Sanitary Water Boards action on March 4, stated, "Further, that a progress report be submitted on or about July 1." I submit the following which is indicative of our progress on the construction of the Waste Water Treatment facilities in this district.

Copies of the bi-monthly written reports to the Chief Engineer of The Metropolitan Sanitary District are attached herewith along with copies of purchase orders to venders for the major pieces of equipment. Republic Steel's program is "On Time" in relation to the CPM submitted to the Sanitary District of Greater Chicago.

All of the underground sewer revisions have been completed, under permit # 69-427 issued by the Metropolitan Sanitary District and The Department of Sewers, City of Chicago, Illinois.

A contract has been awarded to Ed. Gray Corporation, 12230 South Ave. "O", for the erections and installation of all of the components and structures for plants # 1 # 2 and # 3 all of which will be worked simultaneously.

Yours truly,

G. J. Gockstetter
Supt:Fuel-Power-Air & Water
Management

Encl.

GJG/js

cc: file

REPUBLIC STEEL CORPORATION

July 29, 1969

Mr. Forrest Neil, Acting Chief Engineer
Metropolitan Sanitary District of
Greater Chicago
100 East Erie Street
Chicago, Illinois 60611

Progress Report

Dear Sir:

This progress report is being made in accordance with (b) paragraph 12 of the Stipulation between the Metropolitan Sanitary District and Republic Steel Corporation dated February 13, 1969. This report is based on the CPM diagram (rev 4) submitted with a letter to Vinton W. Bacon dated December 6, 1968 along with other attachments.

> A general construction contract was awarded to the Edward Gray Corporation of Chicago, Illinois, on June 24, 1969 for the Gravity Sewer "C" force mains, pumping stations and all of the facilities for plants #1, #2 and #3.
>
> Excavation has started on all three plants for the foundations which requires dewatering and in some cases, blasting to clear the sites.
>
> The underground sewer revisions in both sites in complete.
>
> The Waste Water Treatment plants construction, is on schedule relative to the CPM diagram (rev 4)

Yours truly,

G. J. Gockstetter
Supt:Fuel-Power-Air & Water
Management

GJG/js

cc: E. Knight MSD
C. Klassen SWB

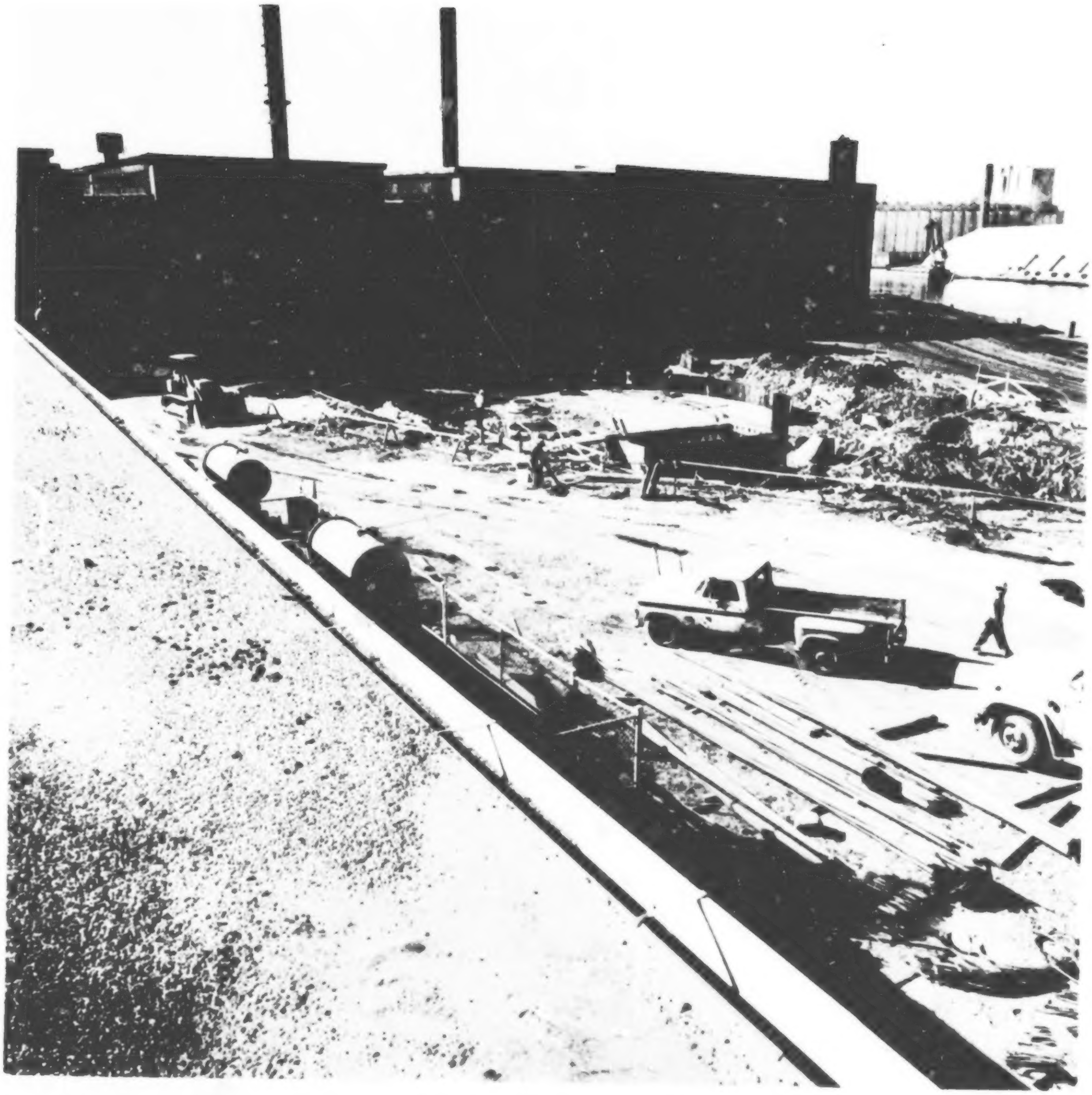
bcc: R. P. Carpenter
A. A. Kappenhagen
R. W. Engelbert
L. F. Birkel
J. W. Mills

MR. GOCKSTETTER: I would also like to submit some photographs which were taken just this past week showing the site of the No. 3 plant, showing the diversion structure and the area where we must relocate underground lines. This closeup here, it is this picture number 42 D, gentlemen, shows the sewer which is a 48-inch sewer completed and the gas, water and nitrogen or oxygen lines are being relocated around this area.

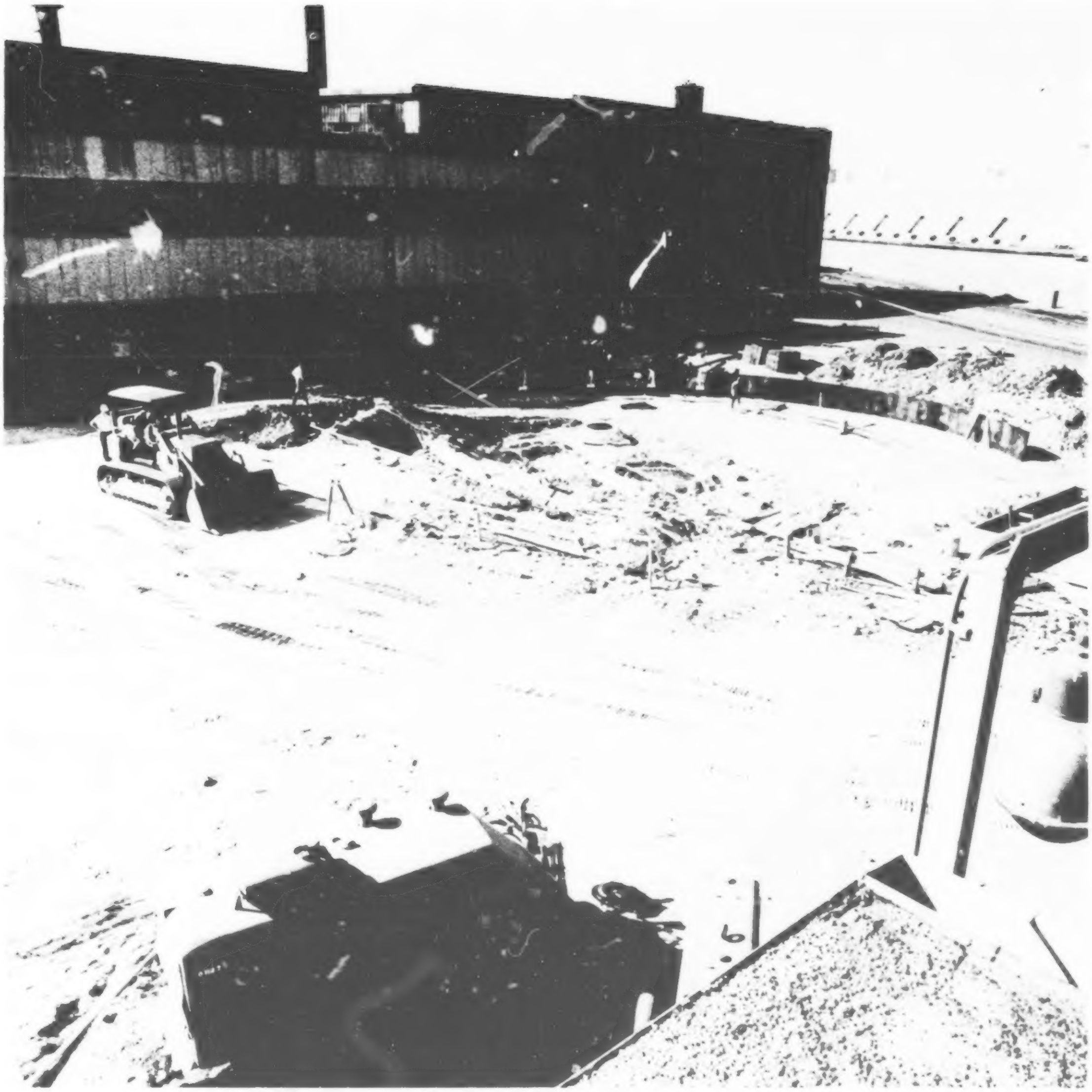
This is a picture of plant 1 and 2 showing the forming. This is on picture 42 L, 7242 L. It shows the forming which has started and the circular form for the clarifier.

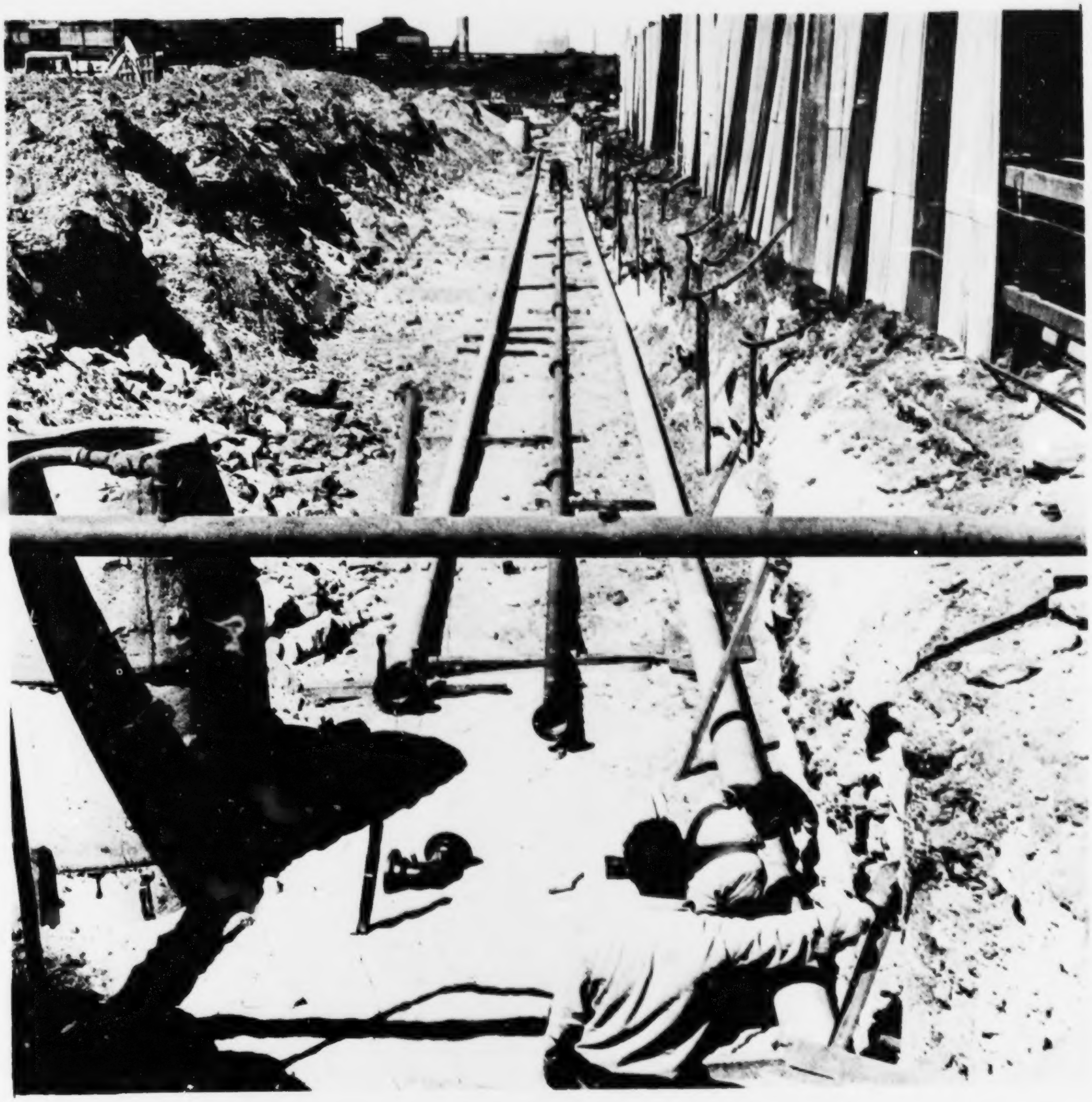
There are some other pictures there where you can see where we are moving on the project.

(Which said pictures are as follows:)



GRAY





MR. GOCKSTETTER: I believe you would be interested in a brief statement about the current status of Republic's program so far as the Metropolitan Sanitary District of Greater Chicago and the Illinois Sanitary Water Board are concerned.

On February 13, 1969, a stipulation was entered between the Metropolitan Sanitary District and Republic agreeing to an order which concluded a show cause proceeding against Republic. The stipulation was arrived at after Republic had submitted a program and time schedule for the construction of water pollution control facilities which included the three wastewater treatment plants I have described.

As part of the stipulation,Republic requested that the Metropolitan Sanitary District transmit to the Illinois Sanitary Water Board for its consideration, pursuant to its Rules and Regulations SWB-15, Republic's proposed construction program and CPM diagram, together with Republic's request for an extension of the completion date for these facilities to December 31, 1970. The completion date provided in SWB-15 is September 30, 1969.

The order entered pursuant to the stipulation directed Republic to continue expeditiously the construction of the waste control facilities and to submit bimonthly written reports setting forth Republic's progress and directed the attorney for the Sanitary District to transmit to the Illinois Sanitary Water Board Republic's request for an extension of compliance and completion date.

At a meeting on March 4, 1969, the Illinois Sanitary Water Board took the following action:

"I move that the Technical Secretary be authorized and instructed to advise the Metropolitan Sanitary District and the Republic Steel Corporation that the proposal and time schedule appear to be reasonable, but that the Sanitary Water Board will continue to follow its policy of reevaluating the progress made by the corporation, and that on or about the SWB-15 deadline date of September 30, 1969, if the evaluation indicates the corporation has proceeded and is proceeding on the submitted schedule, then favorable action on the requested extension would be taken at that time. Further, that a progress report be submitted on or about July 1."

Thank you, gentlemen, and if there are any questions, you may ask them.

MR. STEIN: Are there any comments or questions?

Yes, Mr. Poston.

MR. POSTON: I would like to ask Mr. Gockstetter two or three questions.

The first one pertains to the disposal of your acid pickling liquor. You indicated you contracted with--

MR. GOCKSTETTER: K-A Steel.

MR. POSTON: --some other company to haul this away. Where did this go?

MR. GOCKSTETTER: They have installed facilities on our property to convert it to ferrous sulfate, which they in turn sell to various sanitary districts for a coagulating aid.

MR. POSTON: The reason I ask this is that I know of certain areas where these wastes have been hauled away and dumped into the streams by a contractor unauthorized.

MR. GOCKSTETTER: No, this is converted.

MR. POSTON: I wanted to check on that.

The second thing that I was curious about was whether the working construction plans have all been completed and have those been given to the Sanitary District?

MR. GOCKSTETTER: All of the drawings are complete. Now, there are some 450 drawings. We have not supplied all of them to them, but we have submitted letters to them which you have there indicating the dates, and so forth, where we have accomplished certain things and submitted copies of the purchase orders to them showing that we have accomplished things in this direction. In addition to that, representatives of the District have been out and inspected the facilities themselves.

MR. POSTON: And then will these plans and specs be available to the Technical Committee who are looking into the water quality as they envision after these facilities are in operation?

MR. GOCKSTETTER: Our plans are open to anybody.

MR. POSTON: And the other question that

I have in my mind is, in your construction how many shifts will be working on this construction project?

MR. GOCKSTETTER: We are working everybody that we can. There are two things that dictate what we can do and one is the availability of manpower and materials. Some of these pumps are very long delivery and we are working as fast as possible, and if we can we will certainly improve the completion date of this December 30.

MR. POSTON: Are you approximately on schedule?

MR. GOCKSTETTER: We are actually a little bit ahead of schedule right now, Mr. Poston.

MR. POSTON: Relative to this shift and how many shifts you are working, I don't know whether I exactly understood how many shifts. I did understand that you said that you are restricted in some areas by receipt of materials and in shortage of labor. I guess my impression is, your main plant is your manufacturing capacity, they operate more than one schedule, is that not right?

MR. GOCKSTETTER: Yes, that is true.

MR. POSTON: Well, I was just interested

in whether or not this work was progressing as fast as the manufacturing?

MR. GOCKSTETTER: Yes. In fact, we are working carpenters some 21 turns a week in some of these areas when we can get them, but they are not always available.

MR. POSTON: For construction--

MR. GOCKSTETTER: For forming for concrete, for example.

MR. POSTON: Yes. Of the treatment works that you are building?

MR. GOCKSTETTER: Wherever we can we use all we can get and based upon the availability of equipment.

MR. POSTON: This is a very enlightening report and I thank you.

MR. STEIN: Wait, we have some further questions.

Do you have some, Mr. Klassen?

MR. KLASSEN: No.

MR. STEIN: Well, I have, and let me try this. I think there are two elements here. One, the substance of what you are doing, and two, the time.

Now I also think, as always when Republic puts in a report, this is a very enlightening report and I think we can get a rather precise notion of what you propose to do.

But as I understand this, by September 30, 1969, which is about a month from now, you expect either to get approval or disapproval, that is of the proposal, from the Illinois Sanitary Water Board. I would like to divide this if I might, Mr. Klassen, into two points. I wonder if the Illinois Sanitary Water Board has looked over these plans and if it is satisfied, aside from the time that it is going to take, that this is going to do the trick, and substantively that a judgment might be able to be reached by September 30. Now, I don't know how big a job that is going to be for you people. But if they are going to make this determination whether you are going to do this or not, do you think it is physically possible to do this by September 30?

MR. KLASSEN: Physically possible--

MR. STEIN: For the Board to make a

determination on the basis of the Republic plans whether what they are proposing is satisfactory or not. We are not talking about the date.

MR. KLASSEN: Let me say, Mr. Chairman, you asked me if I had any questions. I do not, but for the record we have had the plans for a number of months from Republic Steel, we have reviewed them, we are satisfied that when completed they will meet our water quality standards.

In addition to this we have made physical inspections of the progress and feel that as indicated they are substantially up to date if not a little ahead of schedule and that they should finish this on or before December 1970 if they are granted this extension. This will come before the Sanitary Water Board at its October meeting and we will make our last evaluation just before the September 30 deadline, all of which is in accordance with the policy of the Sanitary Water Board to only consider extensions at the time the deadline is reached to see whether in fact the particular applicant for an extension has and is diligently pursuing to the best of his efforts to get this job done.

MR. STEIN: All right. Now, let me state this, because I think this is a very vital point as we move forward in the case.

As far as the judgment of Mr. Klassen and his group in Springfield and without going over these plans I would like to give you my past experience, both with Republic Steel and Mr. Klassen When they said they were going to do something, our experience has been in all parts of the country with Republic or with Mr. Klassen ~~here~~, that the contention and the scientific claims have been entirely valid. In other words, I know and I think I can say this ,if Republic wants to change it, I know of no place in the country in the past where we have dealt with what a plant was going to do or not going to do that we ever had a difference of opinion. And I think this will apply, I maybe will have to repeat it again with United States Steel.

The same thing I think on the facts of the situation and dealing for more than a quarter of a century with the Sanitary Water Board under Mr. Klassen. We have found on the basis of past experience that a review of plans of the Illinois Sanitary Water Board when they said these plans were valid and would work, have occasioned absolutely no difference from us. I believe the record has borne this out.

So what I think we are faced with here, if we adopt standard American engineering practice and we get these plans put forward, as we have by Republic and Mr. Gockstetter and the comments that we have had by Mr. Klassen, I think in the absence of anything some of the conferees may say, that we are fairly safe to indicate that these works will do what it has been said they will do.

When we try to narrow the issues, what we do is we have a specific proposal with specific plans and specifications put forth by Republic Steel plus a willingness of Republic Steel to put in works that are going to produce water quality of the kind required by the Sanitary District, the State and the Federal Government. The sole question, therefore, here that presumably Mr. Klassen's Board has to take up and we have to take up, although this is always an open question and we can go back to this question of whether the plans are sufficient or not, is the date that it is going to be completed. In other words, I think the question of whether the work is going to be done to produce these water quality conditions, to the best of our technical knowledge, is under way and we are all agreed that that is going forward.

Is that a fair statement?

Of course this question of the date is open for the conferees' decision, but I think on the facts of it are there any further questions of Republic?

MR. POSTON: Not for me.

MR. STEIN: By the way--and again without any judgment one way or another on the date--I think this demonstrates what we have had demonstrated in other parts of the country is from an engineering standpoint, from the standpoint of coming forth with a program, every time we have had a water pollution control case and Republic Steel has come forth with a program we have found that that program has performed as advertised and has done the job.

Thank you very much, Mr. Gockstetter.

May we have U. S. Steel now.

HERBERT J. DUNSMORE, DIRECTOR
ENVIRONMENTAL CONTROL
UNITED STATES STEEL CORPORATION

MR. DUNSMORE: Mr. Chairman. I am Mr. Herbert J. Dunsmore, Director of Environmental Control for United States Steel Corporation, and have participated in the previous sessions or other sessions of this conference and welcome the opportunity again to present U. S. Steel's program. I am appearing here today at the invitation of President John Egan of the Metropolitan Sanitary District.

We will choose to go through the comments that I have with the aid of slides, and so I think without taking additional time, let's turn out the lights and start the series of slides.

I am at a disadvantage here for seeing the screen, but I believe this is our outfalls 7, 8 and 9 that go into the Inner Harbor. The one farthest away from me or on your right would be outfall number 7, which carries about 200 million gallons of cooling water a day from the powerplant and has no other contaminants in it other than heat. The outfalls that are closest to me are 8 and 9 that carry the cooling waters, number 8 from our blast furnace and our **slag quenching** operation and number 9 from our flue dust thickener.

Next slide, please.

There has been some question from time to time as to what kind of pollution control facilities existed at South Works prior to 1965 and this slide shows that those areas marked A, for which there are some seventeen or twenty, I believe, are mill scale pits scattered throughout the various mill areas.

There is another area marked B about in the center of the slide which is a pit that comes from the mill that provides another place for oil skimming.

The areas marked C are **slag quenching areas** where we had a problem back in 1965 of popcorn **slag,** and later on I will tell you how that was corrected.

In the area marked D were clarifiers that have been in since 1930.

And I believe **that** covers all the areas marked on the slide. But all of these were areas that existed prior to March of 1965.

May we have the next slide.

This is a mill scale pit and a clamshell bucket just simply removing mill scale to give you an idea of what that particular operation does in preventing solids from getting access to the water.

Next slide.

And this is a little pit at the end of the north slip where we skim oil.

Next slide.

This is a closeup of the two clarifiers that were marked D, and in the background, of course, is the Inner Harbor. These remove flue dust from our gas washing water.

Next slide.

This is an oil skimmer, a belt type oil skimmer, which has been very effective in removing oil.

And since 1965--next slide--we have placed some eight of these oil skimmers throughout the plant and the locations of where they were placed are shown on this slide. They are in the various mill areas where oil is generated.

Next slide.

I am going to have to guess at what that is from here, but I believe that is the site location of our Step I clarifiers which were put on the blast furnaces that used to discharge out sewer number 10.

Next slide.

And this shows a site location. The insert up at the top is the way the ground looked before we started demolition and the main picture is the demolition where we had to clear away a former mill to make room to put in the clarifiers.

Next slide.

This is the finished clarifiers that went into operation about December 1968. Actually a site visit was made by many of you on January 15, 1969, and at that time they were in operation. And you can see that there is a considerable amount of demolition and construction evident in that area.

Next slide.

This is an excavation for a sewer that was necessary to divert the water from the number 10 sewer down to these clarifiers. This was a temporary job to get the wastes out of the Inner Harbor and back into a treatment facility about August of 1968.

Next slide.

Again about spring of 1968 there is a little mark at the end of north slip in orange, which we used a portion or a walled-off portion of the north slip as a recycle system and which we permitted all the mill water to flow to this area and with three oil skimmers to skim the oil off recycled the water right back through the mill.

Next slide.

This is dry **slag** pits which were installed. This happens to be on blast furnaces along the south slip and this portion of water you see is the Calumet River. These dry **slag** pits replace the old system that caused the popcorn **slag**.

Next slide.

And this slide simply shows the location of the former five **slag quenching** pits that did generate popcorn slags that have now been eliminated. There are crosses drawn through those.

Next slide.

This is a portion of blast furnace water that was diverted out of our clarifier and put into sewer number 8 instead of running through the clarifier in an effort to separate cooling water from dirty water carrying flue dust.

Next slide.

That is just a recap of the several actions that we took which completes Step I showing the clarifiers down by the south slip and the various other actions that I have talked about up until now which completed the program that brought our discharges up to the status they were by December 1968.

Next slide.

This is a new construction showing our basic oxygen furnace location and our continuous caster. The large circle by the north slip is the clarifier that was put in for that facility and the small dot which you cannot see, will show in another slide, is the mill scale pit for the caster.

Next slide.

This is the finished basic oxygen furnace with a clarifier.

Next slide.

And this is the continuous caster with the scale pits shown in about the center of the photograph.

Next slide.

This is a portion of our Step II program which is under construction now. Contracts were let for this in March of 1969 and these green lines show the various areas of South Works that will drain into a central treatment facility. The three circles are the three high-rate clarifiers that will treat this water down to a level to meet the effluent requirements for the mill water.

Next slide.

This is a construction shot again down, oh, by the clarifiers that were put in in 1968, but this is the site location of where the three clarifiers will be for the central treatment facility.

Next slide.

This shows a portion of construction work putting in a pump base or a pit to conduct the water to the central treatment facility.

Next slide.

This is the recycle system that will go into the blast furnace area. The green lines will conduct the wastes from the blast furnace up to the clarifiers and then they will go through a cooling tower which is on the immediate right of the clarifiers and circulated back through the blast furnaces.

Next slide.

This shows the construction of the cooling tower as it was about a week ago. The foundation is well under way.

Next slide.

This is a recap of Step II showing both blast furnace recycle system and the central treatment facility.

Next slide.

Just some additional construction pictures that were taken about a week ago showing some of the difficulty in getting sewer lines and constructing in a rather crowded plant site.

Next slide.

This was again taken about a week ago, shows the Inner Harbor at the area that used to be outfall number 10. Mr. Bacon referred to it this morning as having been diverted and this is a photograph to show that it no longer drains into the Inner Harbor.

Next slide.

Another kind of a fly-over recap, again taken about a week ago showing the old clarifiers, but more importantly showing the Inner Harbor out beyond the clarifiers where outfalls numbers 8 and 9 discharge as well as outfall number 7.

Next slide.

This is just another overall shot taken about a week ago showing the general condition of, again, clarifiers and outfalls 7, 8 and 9, which are the only outfalls into the Inner Harbor.

I think that concludes the end of the slides.

I think that in closing I would like to give you kind of a summary of what this means. There is a task force of contractor employees that range between four and five hundred people. The question has been raised as to how much time do they work. We work a forty-hour week and there is a good reason for it, a reason that we don't like, but a fact of life.

This kind of work substantially uses pipefitters and ironworkers, for which many other people, fortunately or unfortunately, in the Chicago area have need, and you couldn't work more than a forty-hour week or a two-shift or a three-shift day if you wanted to. We can't get enough pipefitters and ironworkers now to man the job to the level that we would like to have it manned.

Now, to speed up this contract we let what is called in the trade a turnkey contract, and I suppose that in a certain sense it is like piecework. It is to the contractor's advantage to get the job done just as fast as he can get it done, and for us, we are interested in having it done as fast as it can be done.

There are some 11,280 feet of pipe that have to be laid to complete this job and they range in size from 1-1/2 feet to 6 feet in diameter. They will be poured over 5,600 cubic yards of concrete. It will require enough horsepower when installed to pull a 120-car freight train.

This concludes my remarks and thank you very much.

(The statement in its entirety, including the aforementioned photographs, follows.)

Water Conservation Progress of United States Steel Corporation's South Works

A Report to the Conference
Reconvened by the Secretary of the Interior
In The Matter of Pollution of Lake Michigan
The Calumet River and Related Rivers

Chicago, Illinois

August 26, 1969

By

Herbert J. Dunsmore

Director Environmental Control

United States Steel Corporation

I am Herbert J. Dunsmore, Director of Environmental Control, United States Steel Corporation. As a participant in prior Conference sessions, I welcome this opportunity, provided by the Conference in the matter of Pollution of Lake Michigan, the Calumet River and Related Waters, to report water conservation progress at U. S. Steel's South Works, in the 54 months since this Conference was first convened. I am appearing today at the invitation of the Conferee John E. Egan, President of the Metropolitan Sanitary District of Greater Chicago.

Slide 1
aerial of
South Works

This is an aerial view of South Works, located on the south shore of Lake Michigan. Iron ore for South Works' blast furnaces is delivered by ore carriers like the one shown in the South Slip at the Calumet River, lower right in the photo.

About half of the water required by South Works is used for cooling and returns to the Lake with its quality unchanged, except for the addition of some heat.

Slide 2
Nos. 7, 8
and 9 outfalls
showing clear
effluent

This photo shows Nos. 7, 8 and 9 outfalls. No. 7, the largest in the plant, discharges an average of 200 million gallons of power plant condenser water a day. This water is used only for cooling.

The rest of the water South Works uses to wash blast furnace gas, quench blast furnace slag, cool rolls, transport scale and in other steelmaking processes.

Slide 3
aerial
outlining
Mar., '65
water
treatment

These were the main components of South Works' water conservation system, 4-1/2 years ago, when the Conference in the matter of Pollution of Lake Michigan, the Calumet River and related waters was first convened in Chicago.

Twenty-seven scale pits whose function is to capture scale generated on the eight rolling mills occupy the locations marked "A" in the photo.

Slide 4
34" Mill
scale pit
photo

Here a grab bucket unloads one of eight components of the 220-foot long scale pit, serving the 34" structural mill. Scale removed from the hot steel as it passes through the rolls and waste oils are conveyed by water flume to the pits where the slag settles and oils are skimmed from the surface.

Slide 5
aerial
outlining
Mar., '65
water treat.

Slide 6
photo of sump

Location "B" in the aerial view is the sump adjacent to the North Slip where additional oil is removed. Retaining the water here allows the floating baffle to trap waste oils that escape the pits.

Slide 7
aerial
outlining
Mar., '65
water treat.

Slide 8
slag screens
photo

Popcorn slag was a major pollution problem in 1965. As molten slag from the blast furnaces was quenched in water-filled pits, a small part of the slag granules floated, and they were trapped by rotary screens marked "C" on the aerial map. The abrasion of these sharp-edged particles caused a very difficult screen maintenance problem.

Slide 9
aerial
outlining
Mar., '65
water treat.

Slide 10
clarifier
photo

The flue dust of five blast furnaces was captured in the two 160-foot clarifiers marked "D" on the map, and by 1965, increased iron production had outstripped their dust-collecting capacity.

At that time, plans were already underway to bring water conservation systems at South abreast of production advances. We found ourselves in the position of a growing family still living in an old house, with leaky pipes and radiators, while they are building a new home across the street with modern plumbing and heating systems.

Meanwhile, until the new house is finished, they are installing new elbows, pumps and valves to keep the old system working with as little offense to their neighbors as possible.

Slide 11
belt skimmer
photo

Slide 12
aerial with
oil skimmers
outlined

Oil recovery improvements initiated Step I of South Works' water pollution control program. This traveling belt oil skimmer and seven more like it, installed at locations marked "E", greatly improved waste oil recovery. A skimmer boat was also installed in the harbor to remove surplus oil.

Slide 13
aerial outlining
new clarifiers

Slide 14
photo of razing
blooming mill

To make room for additional clarifiers located at the area marked "J" on the aerial photo, this 40-inch blooming mill was demolished.

Slide 15
photo of finished
clarifiers

Placed in operation in December, 1968, these 110-foot diameter clarifiers can clean 720,000 gallons of gas washer water per hour from blast furnaces 1, 2, 4, and E bordering the South Slip. With their coming "on stream", the blast furnace gas cleaning water at South Works was significantly improved.

An interim step, in April, 1968, the No. 10 sewer line discharge to the inner harbor was stopped by diverting its flow. A sump was built to settle out scale and a pump installed to divert this flow to the Calumet River and the South Slip. Here you see the installation of 220 feet of 36-inch sewer line which was necessary to achieve this diversion.

Slide 16
sewer pipe
installation
photo

The popcorn slag problem ended in this blast furnace area with the installation of dry slag processing on 2 and E furnaces in November, 1967, and April, 1968, and the blowing out of No. 4 blast furnace in April, 1968, and No. 1 blast furnace in July of that year. Both returned to operation using the dry slag cooling process. This view of the Calumet River shows the new dry slag processing beds of furnaces 4 and E.

Slide 17
dry slag
pit photo

Recycling and diversion further enhanced effluent quality at outfalls 2, 3, 5, 8 and 9.

Slide 18
aerial with
No. 5 sump
recirculation
system outlined

The quality of the water discharged into the North Slip in No. 2 and No. 3 outfalls, was greatly improved by diverting the effluent from the 96-inch wide plate mill scale pits to No. 5 diversion sump where it is now discharged into a recirculation basin. The twin outfalls now discharge essentially cooling water from the open hearths, intermittent discharge of vacuum degasser ejector condenser water, basic oxygen furnace shop gas cooling water and power station condenser cooling water. These changes were effected in 1968.

Slide 19
showing slag
quenchers
crossed out on
aerial photo

No. 8 outfall in the inner harbor formerly handled slag quencher water from No. 11 and No. 12 blast furnaces. The quality of this discharge was greatly enhanced by improving the rotary screens at No. 11 and No. 12 blast furnaces and converting No. 10 and No. 6 blast furnaces to the air-cooled slag process. Taking No. 5 and No. 8 blast furnaces out of service in 1968 ended their granulated slag problem. The new No. 8 blast furnace will also use the air-cooled slag process. The conversion of No. 11 and 12 furnaces to dry slag processing, scheduled for July, 1970, will completely eliminate the popcorn slag problem.

Slide 20
aerial
outlining
cooling water
diversion

Several changes have improved the quality of blast furnace clarifier effluent discharged in No. 9 outfall. In December, 1967, 5,000 gallons of cooling water per minute were diverted from the clarifiers to allow for improved treatment of gas cleaning water. The use of a polyelectrolytic was begun to improve the settling capacity of the clarifiers and the installation of these new lift pumps, further improved clarifier efficiency.

Slide 21
aerial with
Step I
outlined

Now the aerial photo shows two stages of development: The installations that made up South Works' conservation system in March, 1965, are colored yellow. The new systems installed and in operation by December, 1968, are marked in red.

Step I of South Works' Water Pollution Control Program was completed in December, 1968.

Slide 22
aerial outlining
BOP shop, gas
cleaning system
and continuous
caster scale
pit

Slide 23
BOP shop, gas
cleaning system
photo

With construction underway on so many conservation systems, it is impossible in a single presentation, to do justice to all of them. Two major projects not directly related to either Step I or Step 2, have vital significance, in my opinion, to this Conference. They are the BOP Shop gas cleaning system and the continuous caster scale pit.

The sophisticated cleaning system in the new basic oxygen steelmaking shop embraces a complex of spray chambers, scrubbers, centrifuges and cooling towers that occupy almost as much space as the production facility they serve. This wet scrubber cleanup system, representing the most efficient application of modern control technology, went on stream with this new steelmaking facility in January of this year.

Slide 24
aerial showing
central system
outline

Step II of South Works' Water Pollution Control Program is now well into the construction phase. One of its main components is this Central treatment plant which will provide additional treatment for process water used in the Electric Furnace Shop vacuum degasser, the Open Hearth Vacuum degasser, the Open Hearth slag quencher, and cooling and flushing water from all eight rolling mills. Step II installations are marked in green.

Slide 25
central treatment constr.

The system will be composed of three 125-foot diameter sludge recycle clarifiers shown here under construction. The other components of the system, a 65-foot thickener, now in the foundation stage, and two rotary drum type filters will also be erected on this site.

Slide 26
sewer pipe
installation

This 72-inch pipe will conduct the clarified water from the clarifiers to the South Slip.

Slide 27
recycling
system outline

Slide 28
photo:
construction of
recycling
system

Slide 29
second
recycling photo

The second major component of Step II is a complete recycling system for the gas cleaning water used in Blast Furnaces 8, 10, 11 and 12. The cooling tower is now under construction and will be located at left on the photo. Note that the installations shown at right are the existing clarifiers, incorporated in the new system. When this recycling system goes "on stream" the discharges of gas cleaning water from the North Slip blast furnaces will be eliminated.

Slide 30
full outline
of water
conservation
system

These new systems will be placed into operation as they are completed, and the entire complex should be "on stream" by December 31, 1970, in accordance with the Metropolitan Sanitary District of Chicago Timetable. On that date, South Works will have one of the most efficient water conservation systems in the industry.

Slide 31
continuous caster
and scale pit
photo
(to come)

The new continuous caster, now under construction, illustrates how process change can reduce pollution. By eliminating the primary mill, the continuous caster substantially reduces the formation of scale, and, consequently, improves scale recovery efficiency. The cleared effluent from the scale pit is repumped to the plant water system for reuse.

The management of South Works provided some interesting figures which may help us grasp the full dimensions of this control program.

Slide 32
photo of
workers on
job

A task force of contractor employees is now well along in the construction of the big water conservation projects at South Works. When they have completed their job, they will have laid 11,280 feet of pipe, ranging in diameters from 1½ to 6 feet and an equal amount of smaller pipe. They will have poured 5,600 cubic yards of concrete, enough to construct the basements of 120 two-bedroom houses, and the pumps they will have installed will require enough horsepower to pull a 120-car freight train.

Slide 33
(to come)

This photo shows the harbor as it appears today.

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August 26, 1969

This aerial photo of No. 7, 8 and 9 outfalls at South Works shows condition of water leaving the plant and returning to Lake Michigan. Public beaches are open for swimming within a few blocks of this site.

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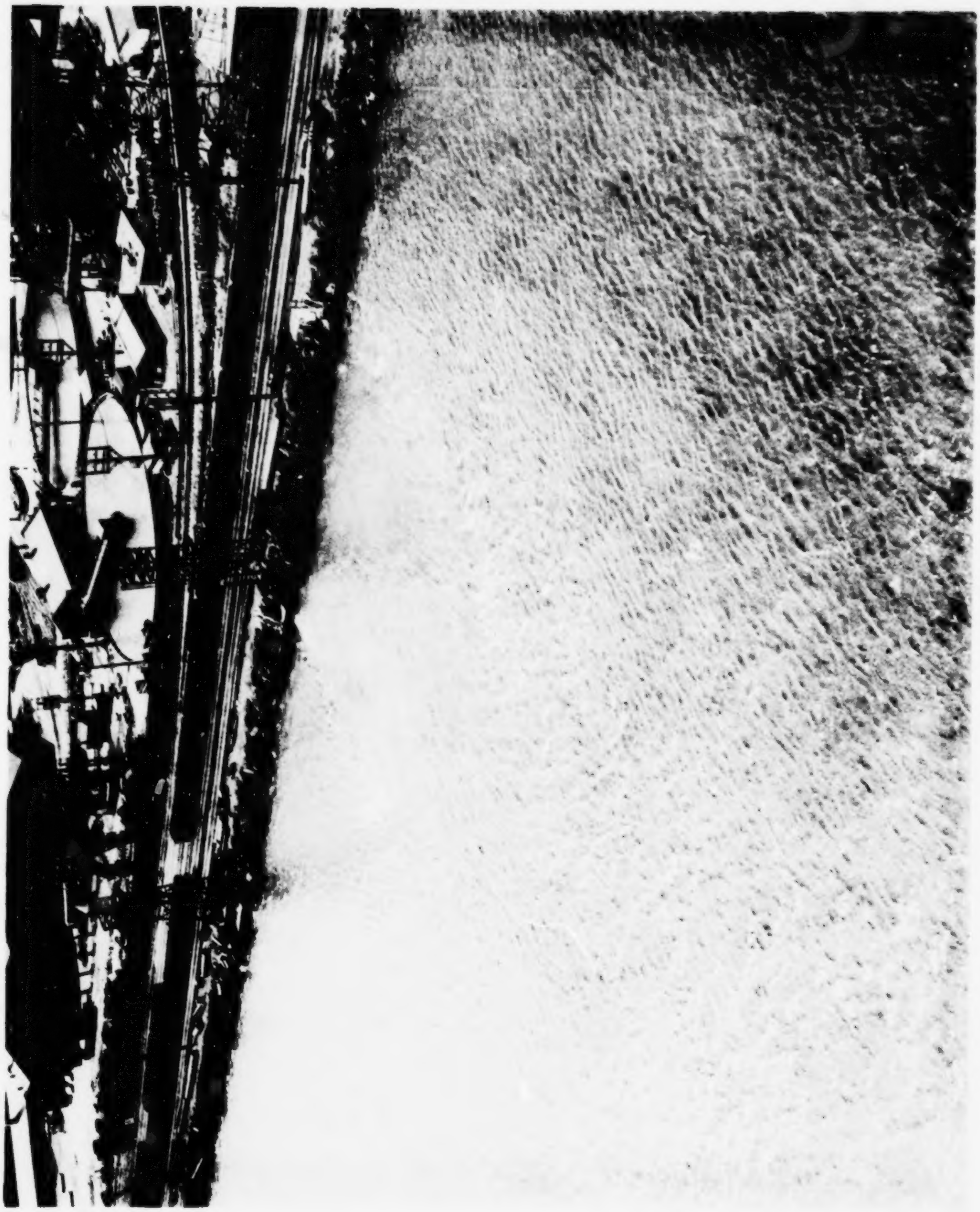

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The recycling system for gas cleaning water used in blast furnaces at South Works as seen from the air. The cooling tower is now under construction.

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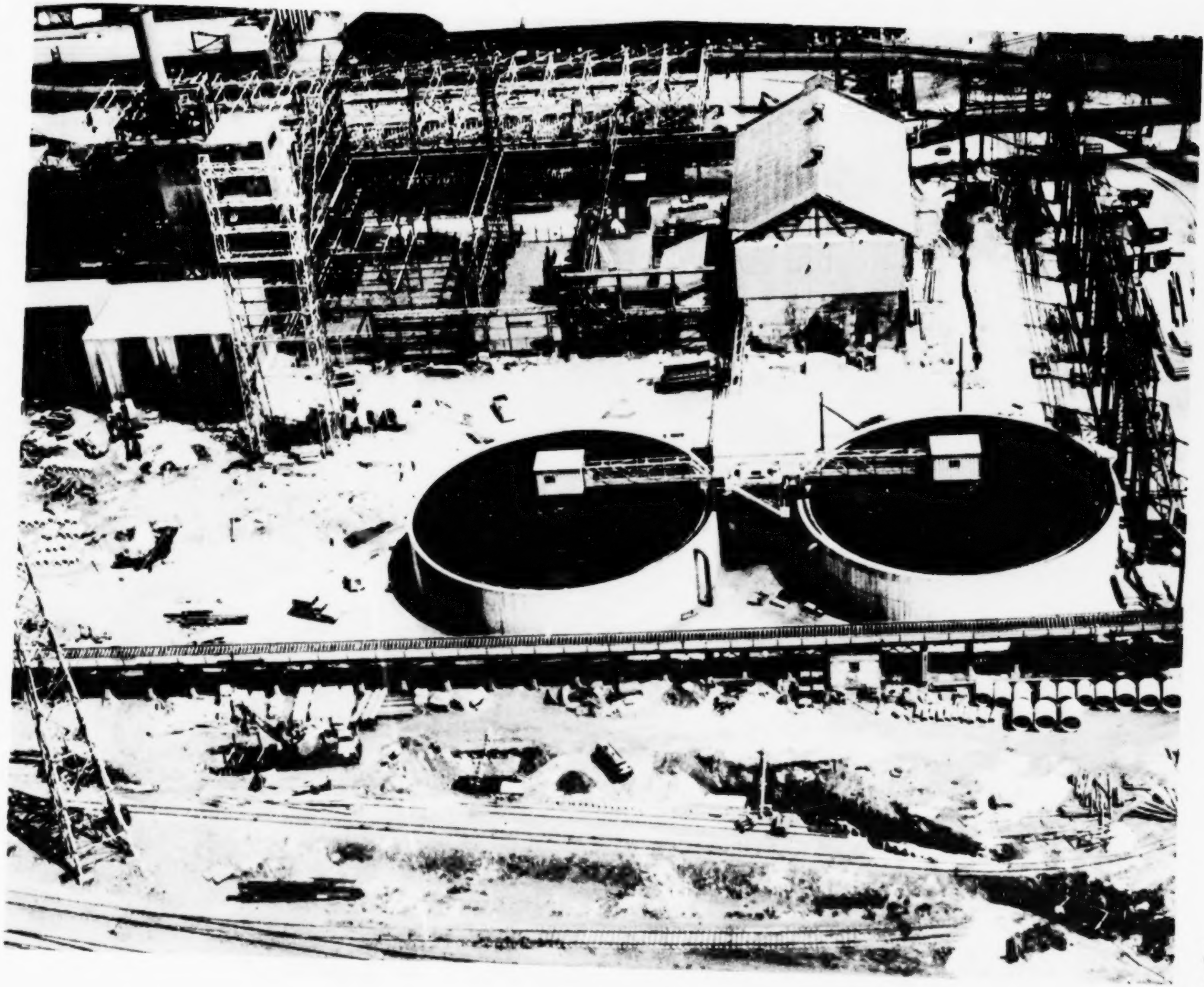

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August 26, 1969

View of Calumet River with U. S. Steel's South Works on right.

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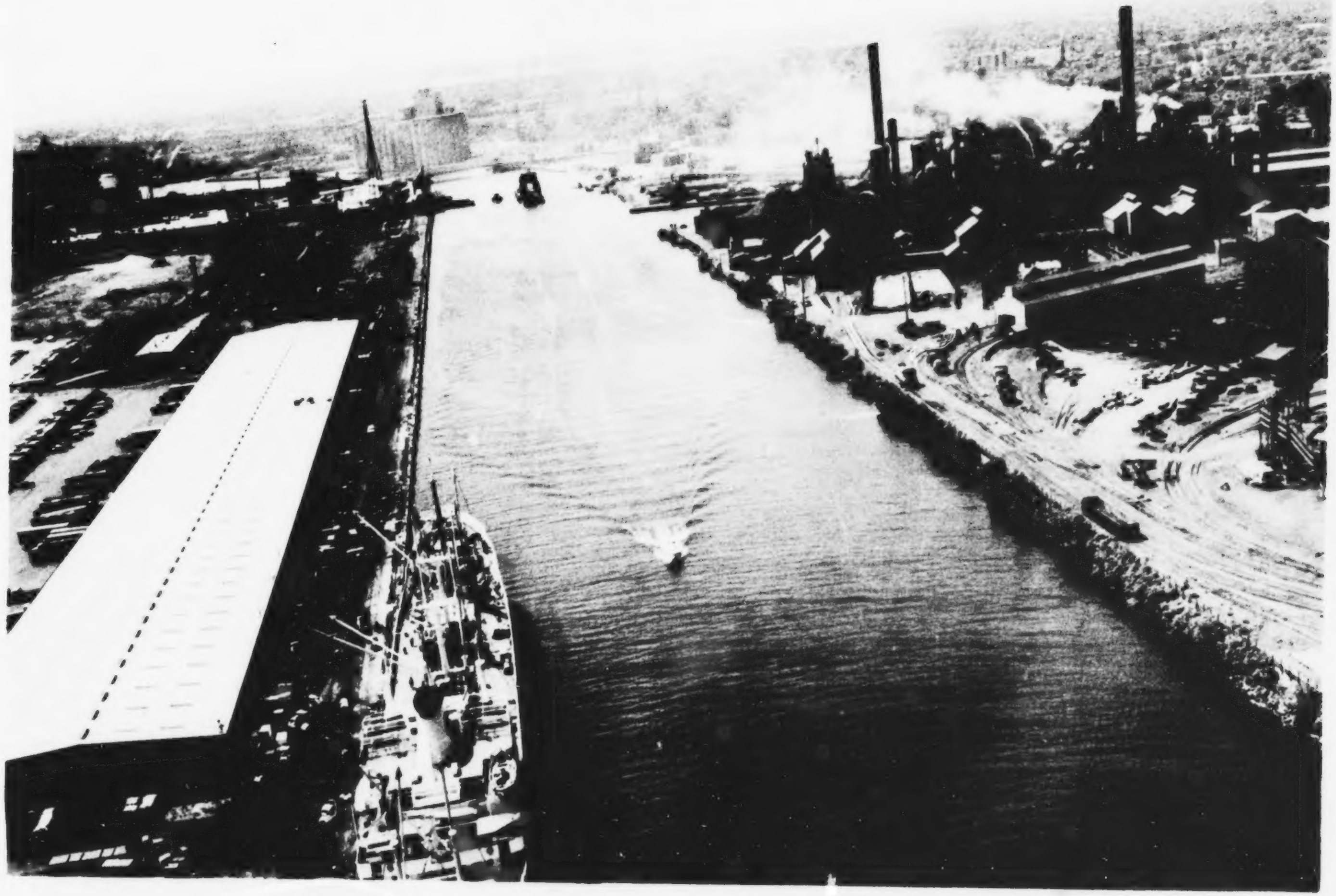

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Clarifiers for blast furnaces 1, 2, 4 and E at South Works seen from the air. Placed in operation in 1968, these 110-foot diameter clarifiers can clean 720,000 gallons of gas washer water per hour from the four blast furnaces bordering the South Works slip.

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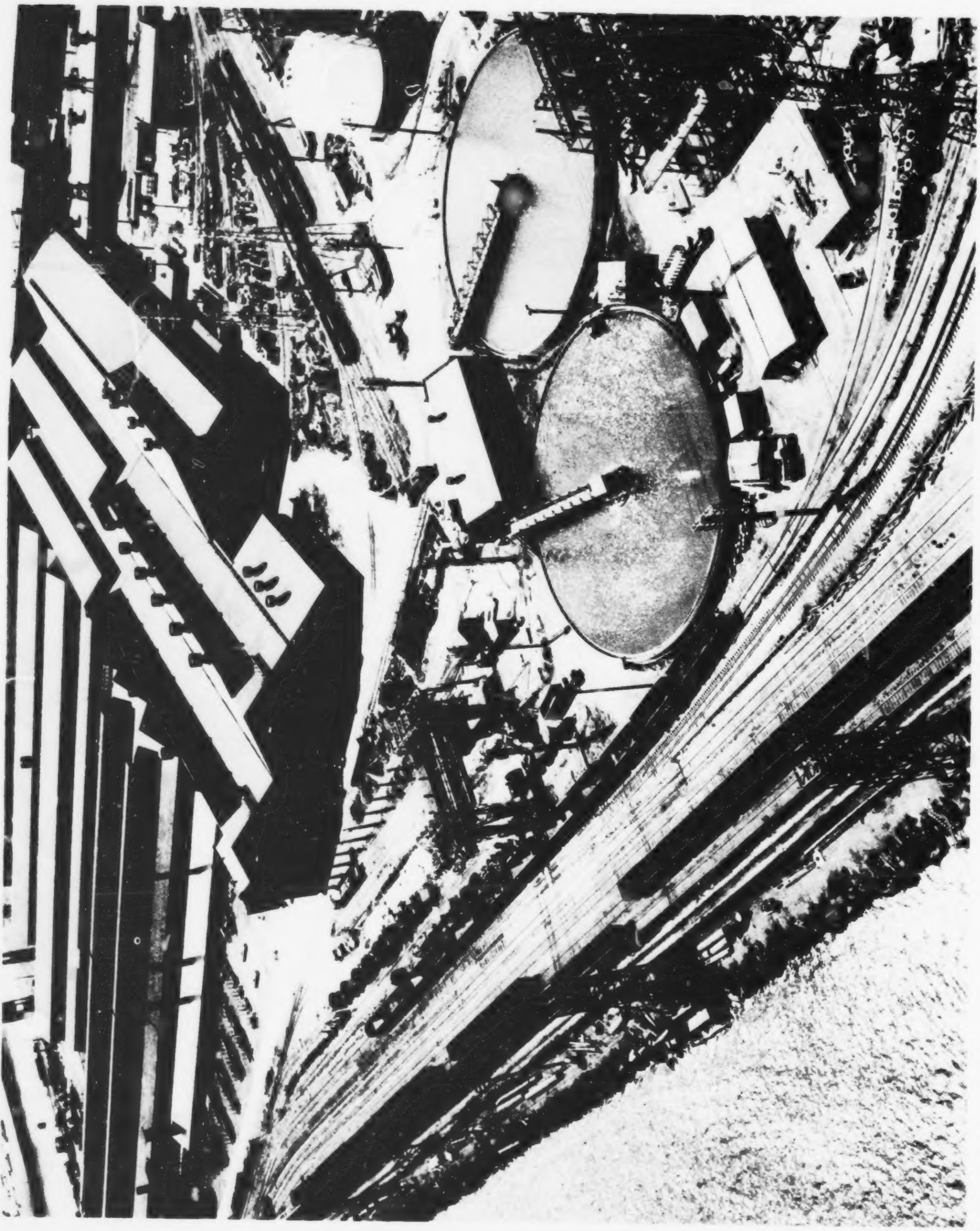

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Aerial closeup of BOP shop gas cleaning facilities at U. S. Steel's South Works in Chicago. The sophisticated cleaning system in the new basic oxygen shop embraces a complex of spray chambers, scrubbers, centrifuges and cooling towers.

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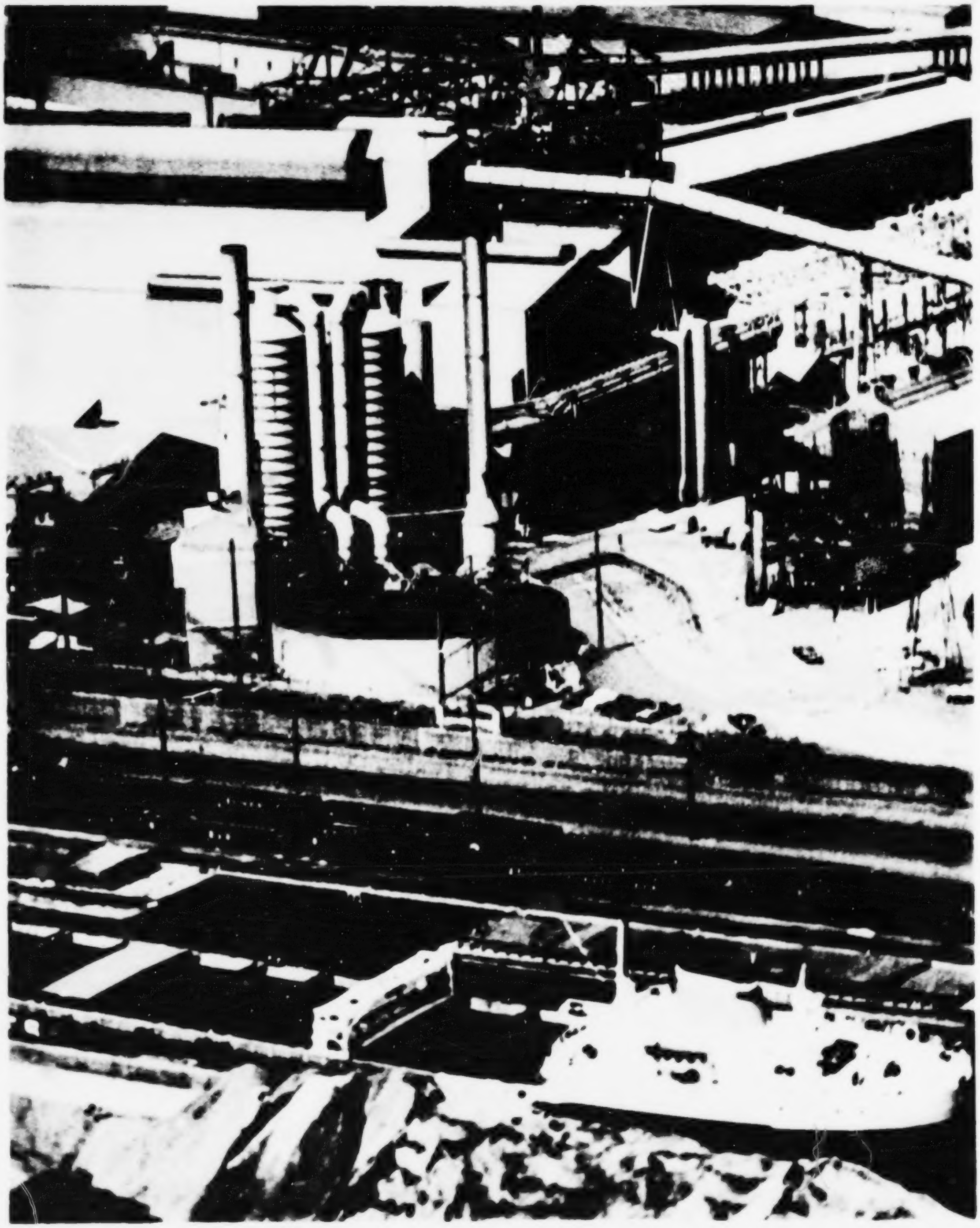

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August 26, 1969

Harbor at U. S. Steel's South Works. The plant has made major progress in combating water pollution through installation of most modern cleaning devices.

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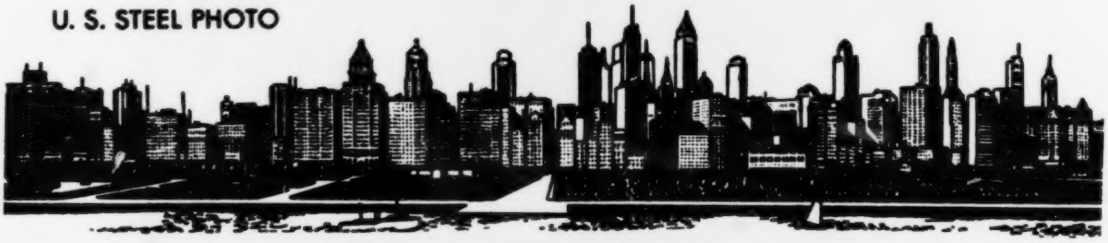

MR. STEIN: Wait a minute, Mr. Dunsmore. Do we have any questions or comments?

MR. POSTON: I would like to ask, are your plans and specs completed for all of this work, detailed working plans?

MR. DUNSMORE: You are never quite completed until the contractor is through with the job, but let's put it this way:

The plans and specifications, the engineering on the job is ahead of the contractor and has been and will continue to be, I might say.

MR. POSTON: Would these plans be available to the Technical Committee if they desire to see them in connection with their work assigned by this conference?

MR. DUNSMORE: The answer is yes, but there are general arrangement drawings now available. I thought your question implied detailed construction drawings and they are not all available now even to us. The engineers are still drawing on them.

But the general arrangement drawings are certainly done and this is what the contract is bid on.

MR. POSTON: How much of your work would you say has been completed at this time? Percentagewise, maybe?

MR. DUNSMORE: I understand the question, and I don't know that I have a better answer than this.

We started to work in March of 1969 and it is scheduled for completion by December 1970, and I am satisfied that at least we are up to schedule or ahead of schedule. I am sure we are not far ahead of schedule because of the shortage of labor that I mentioned.

MR. POSTON: Relative to this shortage of labor, I have always felt that this has something to do with adding an additional shift and the matter of some overtime, and my conversations with contractors have led me to believe that if there is some overtime involved you can get practically anything done. (Laughter.)

MR. DUNSMORE: Well, of course, construction is not my specialty, but I have been told by people in our corporation that do know that the competition for pipefitters and ironworkers in the Chicago area is very keen.

MR. POSTON: Well, I brought this out because we have been involved in recent days with labor wondering where they could fit in and where they would be able to get their people hired. I am not sure that they are the same categories, but I know they are quite adamant in their desires to get an equal employment opportunity.

MR. STEIN: Well, Mr. Poston, you have just given me an idea. You know, I have needed a lot of work from the Chicago area. I am going to suggest that you work your people overtime. (Laughter.)

MR. POSTON: I opened my mouth all right.

MR. KLASSEN: Occasionally I agree with you, Mr. Chairman. (Laughter.)

MR. STEIN: Well, let me try to get back to some basic questions here, and this will be the same thing that we asked about Republic, essentially.

One, you say you have a system and you are on stream by December 31, 1970, in accordance with the Metropolitan Sanitary District of Chicago timetable. What is that timetable based on? As I understood Republic, their timetable was based on approval by the Illinois Sanitary Water Board.

Is yours the same way or do you have an agreement with them independently of that or do you have the approval of Illinois?

MR. DUNSMORE: Well, as Mr. Bacon reported this morning, we have a summary of work schedule, he calls it a Critical Path Method, of determining the length of time of construction and this was first submitted in September of 1968 and has gone through, I believe, five revisions. The last one was submitted to him on June 6th of 1969, which does meet his and his staff's approval as to the length of time it will take. And I believe he said that he had transmitted those work schedules to the State, and at least for the record let's say they are available, and also the scheme of what it is we propose to do is available.

MR. STEIN: Yes. Well, here again as I understand it, the same rules presumably apply to you as apply to Republic Steel and these rules are, as far as the approval of the plans, whether they are going to do the job or the date to meet SWB-15 and the water quality standards have to be approved by the State agency. This is correct, isn't it?

MR. DUNSMORE: Yes.

MR. STEIN: Now, in other words, you don't stand in a different position in having your plans approved by Illinois as yet, do you? Or do you?

MR. DUNSMORE: I don't know as I understand exactly the question.

MR. STEIN: The point is we do know on the basis of the previous statements that the Illinois State agency had reviewed Republic's plans and specifications. They are reasonably satisfied that Republic's plans and specs would do the job. At their next meeting or the meeting in October they were going to take up the question of date.

Where do you stand in relation to that? Are you in the same position or a little different one?

MR. DUNSMORE: We are in a little different position, and I thought Mr. Bacon made that clear--that he was negotiating with U. S. Steel regarding the length of time and we were changing our Critical Path Method up until June 6, 1969, and it took his staff a while to review this last draft and come to an agreement on it. And I presume, and I believe it may have been stated by Mr. Bacon, that the next step then, of course, is to take it to the Illinois Sanitary Water Board, but he chose not to do that until first his staff had been satisfied that they had got an acceptable plan.

MR. STEIN: Let me refer back to your statement, then.

"These new systems will be placed into operation as they are completed, and the entire complex should be 'on stream' by December 31, 1970, in accordance with the Metropolitan Sanitary District of Chicago timetable. On that date, South Works will have one of the most efficient water conservation systems in the industry."

That is on the bottom of page 7, Mr. Dunsmore.

At least the implication to me by reading that is Chicago does not have any questions any more and is shooting that on to Illinois. Is this true? Or does the Sanitary District still have questions before they get that to Illinois?

And I want to not lead up to a question in a conference operation, because if we are going to put the burden on Mr. Klassen on making a judgment on the September 30 date and he is a month away and we are not up to the point of sending those things forward to him. I think it would be unfair to look to the State agency to make a real rapid judgment possibly on plans unless he has some prior knowledge of this. Again I wanted to review the whole line of the questioning. Mr. Klassen had indicated that he had seen the Republic plans before.

Mr. Klassen?

MR. KLASSEN: If it is time to put a statement in the record on that, I will be glad to do so.

We received an informational copy of revision number 5 and a draft of an unsigned stipulation--I am reading now--currently the subject of negotiations between the Sanitary District and United States Steel Corporation. I received this from Mr. Egan at 6:32 p.m. last night in my hotel.

And I want to say for purposes of the record, the Illinois Sanitary Water Board deadline for U. S. Steel, as well as the other industries on the

Calumet River, is September 30, 1969, and as of today we have not received a request for an extension of that deadline for U. S. Steel and we are proceeding on the assumption that the enforcement action is the responsibility and under the jurisdiction of the State of Illinois and we will proceed with enforcement action against U. S. Steel on that basis unless the Secretary of the Interior prior to that date makes a decision to assume that jurisdiction.

Does that answer your question?

(Applause.)

MR. STEIN: You have answered the question. I think we are going to have to take up that question of jurisdiction.

But as I see this issue here--and I don't want to speak for the State--but in making a judgment on the equities of this situation on what the Federal Government responsibility in this is, if we have to recognize the primary rights and responsibilities of the States, and we have done that and encouraged that in every case that I know, if we are coming to the end of September and if we know in working closely with the

State agency that there is one more month to go on this operation and if the facts are as they have been stated, that the Illinois State agency does not have a request for an extension or papers before it on which to make a judgment on that request and time is ticking every day, what judgment, I think, can we have when September 30 rolls around?

MR. KLASSEN: To put it a little more bluntly, Mr. Chairman, the Illinois Sanitary Water Board is and will proceed with the enforcement of that September 30, 1969, deadline unless the Federal Government stops us.

MR. STEIN: Well, I don't think we are going to stop you.

MR. KLASSEN: Or join us.

MR. STEIN: And we may join.

Let me tell you this, by September 30, 1969, as well, and I make no prejudgment on what Mr. Klein or Mr. Hickel are going to do, but under the law, unless the situation is changed by September 30, 1969, and there is a judgment that a discharge from U. S. Steel is in violation of the standards, we can serve you with 180-day notice and if that violation is not stopped we can take the case to court after the 180 days.

Now, that is our law. And our past experience, I might say, is that we are not going to compete with or battle the State of Illinois, because I don't think Illinois is the discharger nor is the Federal Government. If I have anything to do with it, we are going to cooperate with them.

Now, I would like to work a way out of this, because as far as I can see here, Mr. Dunsmore, you fully intend and you are moving diligently toward a cleanup. Isn't there some way we can get this reasonably on the track so we can proceed in an entirely amicable way toward a decision? Because I don't believe that court action is going to get this done any faster if we can work out something that is going to be mutually satisfactory other than court action.

MR. DUNSMORE: Well, Mr. Stein, I would like to refer you to the minutes of your last meeting. We believe that it is on the track and has been on the track all along. Your record shows, and I have portions of the transcript with me, that the jurisdiction of this conference as it related to water quality standards established in Lake Michigan as it related to U. S. Steel's South Works was in fact met in December 1968. Now we are continuing with Step II, we have called it Step II, to meet a higher standard, and certainly that recycle system you saw goes beyond any standard that anybody has come up with, because there will be no discharge. And so I don't think we are either at cross purpose or off schedule.

MR. STEIN: You have raised some points, and since we got back I would like to clarify this since we have all the parties here.

First as you know, Mr. Dunsmore, I did not say we would go to a hearing for the second phase of SWB-15. If that is a violation, it is a violation of the standard proposed by Illinois and adopted by the Secretary of the Interior. In other words, in the enforcement of water quality standards, we don't go through this procedure of conference, hearing, and court action, just a prior 180-day notice, and if necessary we then go to court on that day. That is why I said that.

But the next point, and I would like Mr. Poston to pay particular attention because I don't want to leave here again and get conflicting reports on this, are we all agreed that United States Steel is in conformity with the recommendations of the conference? Is that your understanding, Mr. Poston?

MR. POSTON: That is not my understanding.

MR. STEIN: Why?

MR. POSTON: I never admitted and never said that I thought U. S. Steel was in conformance, because I see oil in the Calumet Harbor, I see the wastes, I even see in Mr. Bacon's report today that U. S. Steel South Works is putting--and I could read these figures right here off of his report--United States Steel Company South Works, pounds per day, the first 6 months of the year at Calumet Harbor for 1968 was 104,000 pounds of suspended solids, 37 pounds of phenols, 657 pounds of cyanide, 41,862 of hexane soluble, 1,000 pounds of ammonia nitrogen, and they have reduced that from the 1968 figures in part of the cases, not in phenols, that has actually increased and so has the ammonia increased, and I don't regard them as in compliance.

MR. STEIN: Do you have any comment on that? Because I went away the last time, Mr. Dunsmore, having the same impression that you had, and then when I got back I began to get all this contrary information--that the feeling, at least from the Federal conferee, was that it was not believed that you were in compliance.

I think we have two points. And by the way, this may be the subsidiary point. We may cut through both these points. Let me raise the points and you take them as you wish.

One, if we can put this in proper posture I think the next step, we all agree, is that the Illinois Sanitary Water Board has to review the plans and specs and act both on the plans and specifications of the program and a possible date extension. If we could get this program in that posture when if it is cleared by the Sanitary District up to Illinois, I think we will proceed with the next orderly step.

Now, how can we do that? If we do that, this may solve that other question. I am not sure it will. But let me put it this way: If you complete the work that you have described here, I think you are going to meet all requirements.

MR. DUNSMORE: Yes, there is no question

about it.

MR. STEIN: No question on that. Now, the question is now can we get this on the track so that the next agency which should have this now, Illinois, gets that and can act on that in an orderly manner?

MR. DUNSMORE: Well, I will have to give you my judgment on it, but I think that any person, or any industry in this case, has to look to his responsible control agency for this kind of a decision and that in this case, we believe, is the Metropolitan Sanitary District. We have consistently met with them and been in close agreement, they knowing what we were planning to do and they had passed judgment on what we planned to do, and at your last meeting, and you will find it on page 599 of your transcript, Dr. Jerry Stein, who was then an employee of the Metropolitan Sanitary District, did state that in his judgment and from the facts that he had that U. S. Steel South Works was in compliance.

Since that time we have submitted additional plans to the same control agency and after extensive engineering review have reached agreement on Step II, and when they are completed we believe that this will meet any effluent standards that are now on the books and certainly in the recycle system any that you could conceive of in the future.

MR. STEIN: All right. Let me try again. If there is--and I think Mr. Bacon isn't here any more, is he?

MR. EGAN: Yes, he is.

MR. STEIN: Oh, he is? Well, Mr. Bacon, I think--at least I thought I followed him very thoroughly this morning--said the reason that plans had not gone forward was that he was in the process of negotiation, and well I know that, being in this business a long time, and there may have been five different sets of plans that went back and forth for a tightening up and establishment of an agreed-upon operation.

Let me ask a question. Do I understand it at the present time that you, that is U. S. Steel, and the Sanitary District are in agreement on these plans in the form that those plans can be submitted to Illinois?

MR. DUNSMORE: Can be?

MR. STEIN: Yes.

MR. DUNSMORE: Yes.

MR. STEIN: Now, the question then is, as I again understand it, Mr. Klassen has not formally received these plans or requests for an extension from the September 1969 deadline. Is that correct?

MR. DUNSMORE: Well, I wouldn't have a way of knowing it, but--

MR. KLASSEN: That is correct.

MR. STEIN: Is it? All right. Therefore, unless someone can state this differently, it seems to me that if this is the next step in the procedure; if we are working on this I think we all agree, local, State, and as the Congress intended, Federal, you have come to an agreement with the local agency first. I would encourage in every way and I am sure U. S. Steel from its past performance would encourage the State to take action rather than the Federal action.

Now, the point is, I think, if we are going to come up with a judgment on this, 1), we have to determine when these plans and a request is going to come to Illinois; and 2), if we can at this date reasonably expect Illinois in its orderly process to be able to come up with a considered judgment by September 30 when they have a date running out.

MR. KLASSEN: Do you want an answer to that?

Well, we will come up with a considered judgment if we have anything to judge. But lacking that we have no other alternative than to request our Attorney General to enforce the September 30, 1969, deadline. That is where it stands with us.

MR. STEIN: Now again let me direct this question if I may, if you don't mind, to the District.

One, will the plans and will the request for the extension, as it has been with Republic, be made in the case of U. S. Steel to the State of Illinois?

Mr. Bacon?

MR. BACON: This was by telephone reported to the State Sanitary Water Board immediately following the Board of Trustees action. Then it was followed up by an informal--I say informal; we didn't put it before them real formally yes or no on September 30 for the simple reason that within the Board of Trustees they were still trying to work out a solution within the judiciary committee and the Board of Trustees so they could take the action first if possible. By that I mean that the Board of Trustees could firm up yes or no as to how they stood on this extension. This is the reason we kept it in the informal category with the State Sanitary Water Board. Well before the September 30, 1969, deadline we can put it formally and officially in front of the State Sanitary Water Board. We have been trying to get an action within our own group that would make it simpler for the State Sanitary Water Board to then act.

I don't know if I am coming through to you loud and clear.

MR. STEIN: You surely are.

MR. BACON: What I am trying to say is we are trying to solve this decisively within the District. Failing that we will have it before the State Sanitary Water Board well in advance of September 30, 1969, officially. What Mr. Klassen has said is absolutely accurate--they have been informational; they have been somewhat informal simply to keep him advised; and the fact that he can't make a decision today and give you a yes or no rests basically yet with us.

MR. STEIN: I well understand that because--

MR. BACON: But we are not going to miss that September 30, 1969, deadline.

MR. STEIN: This is what I want to make clear on this question of the time fuse. When it comes to September 30, 1969, Mr. Klassen has indicated that his date has run out, and it is a Federal standard and our date has run out.

This is the point I want to make. Any agency--and I would say this for yours as well as Mr. Klassen's--if you are going to get a request for an extension you have to have it in advance in a reasonable time. If you have foreknowledge of this, that we are going to have a proposal for a 1970 date within a reasonable time prior to September 30, 1969, any agency, including Mr. Klassen's can make a considered judgment. They can't have it at the eleventh hour and we can't make a judgment on the State's action unless they have a sufficient time in which to carry out their own program.

This is a pretty complicated proposal and presumably Mr. Klassen and the staff have to review it and consider it.

MR. BACON: This is why we gave informal telephone notice, then formal notice otherwise, so that he could be getting prepared. I think, Mr. Stein, some of it revolves around the conference as of today, too, as to what comes out of this in action.

I think I can speak the sentiments of the Board, although you have a conferee up there, I think I am speaking for the whole Board when I am saying that they are extremely reluctant to grant any extension of time to anybody. They have made this abundantly clear. Although on the other hand, certainly we have to face realities that maybe certain things can or cannot be gotten, and so they have been reluctant to even state to the State Sanitary Water Board, "We wholeheartedly recommend this."

I think they look to this conference

somewhat to get its feelings too, because let's not overlook the fact that we have three basic agencies confronting this problem and I think we want the sentiments of this group too. And when I say "we" I am speaking for the Sanitary District and the Board of Trustees.

MR. STEIN: I think--as a matter of fact I am sure, I understand you very well. But what is confusing the operation is this, again, when it says:

"These new systems will be placed into operation as they are completed by December 31, 1970, in accordance with the Metropolitan Sanitary District of Chicago timetable."

And I am reading from the U. S. Steel statement.

Now, with the report or with your statement, Mr. Bacon, of the reluctance of the Board, which was my understanding, it is surely not in accordance with the Sanitary District timetable, because you haven't decided to ask for that extension yet.

MR. BACON: Well, I remind you we have until September 30, 1969, and we have plenty of time to work with our colleague State agency to get this done.

I am simply saying I don't think that we are going to squeeze the State Sanitary Water Board and I don't think we are going to be squeezed in the Sanitary District either. We are all well aware of the time available to make these decisions.

I go back to the point I just made, we thought and we are looking for some guidance from this group right here, because this group here reflects the entire area, Indiana, Illinois, Federal agencies, and so forth, as to what is being done on a timetable. So if you are worried about a relationship between the Illinois State Sanitary Water Board and the Sanitary District, I think we will have our timetables in order.

MR. STEIN: No, I am not worried about that in the last question. We are trying to get this from the Board. The point is that the recommendation--and, of course, we have to get this from the conferees--that a December 31, 1970, date for U. S. Steel is not necessarily now in accordance with the Metropolitan Sanitary District of Chicago timetable, is it?

MR. BACON: Our timetable is September 30, 1969.

MR. STEIN: Thank you.

Are there any further comments or questions?

Mr. Dunsmore, do you want to say any more?

MR. DUNSMORE: No.

MR. STEIN: All right. Thank you very much.

Any other comments from the Board?

May we call on Mr. Poole from Indiana.

Mr. Poole.

BLUCHER A. POOLE, TECHNICAL SECRETARY
INDIANA STREAM POLLUTION CONTROL BOARD
INDIANAPOLIS, INDIANA

MR. POOLE: Mr. Chairman, at the December 1968 meeting we had five industries that were incomplete, and I have covered these in the attached brief report which is being passed out to you.

Adolph Plating Company of East Chicago. You, recall we had ordered Adolph Plating Company to install the necessary works and they had objected to our order and we referred it to the Attorney General. Judge Felix Kaul on April 23, 1969, ordered the industry to obtain materials and equipment for installation of treatment facilities by September 30, 1969, and complete construction of the waste treatment facilities approved by the Indiana Stream Pollution Control Board on or before March 31, 1970. This court decision was obtained under action initiated by the Board for enforcement of its pollution abatement order dated December 5, 1967. The company has ordered all equipment required and should let contracts for construction in the near future.

Steiner Tissue Division, Georgia-Pacific Corporation, Gary. The waste treatment facilities were completed during June 1969 and by July 1 the pretreated wastewater was discharged into the Gary Sanitary District sewerage system. Completion of construction was delayed by late delivery of the sludge scraping mechanism for the clarifier and completion of the sludge lagoon. I believe we reported that as the difficulty in December.

U. S. Steel Corporation, Gary Sheet & Tin Mill (now Gary Works West), Gary. The quarterly progress report dated July 31, 1969, and inspections by representatives of the Board during late July show that construction on the lift stations to convey the Sheet Mill and the Tin Mill to the terminal treatment plant (6-Stand Tandem Cold Reduction Mill waste treatment plant) were completed during June 1969. Construction will start soon on a sewer and lift station to convey the treatment effluent from the 80-inch Hot Strip Mill scale pit to the 84-inch Hot Strip Mill filtration facilities for additional treatment. Table I summarizes the time schedule and status of construction of each project. The time schedule that was considered for that particular part of the Sheet and Tin Mill was March 1, 1970.

U. S. Steel Corporation, Gary Steel Works, (now Gary Works East), Gary. The quarterly progress report dated July 31, 1969, and inspections by representatives of my Board during late July show that construction is proceeding very well on the terminal oil and solids removal basins for the Blast Furnace area, it is sixty percent complete. The completion date was December 1, 1969.

And next for sewers, sumps, pumps,

piping and terminal oil and solids removal basins for the Hot Mills area. It is forty-five percent complete. The date on that was 12-31-69. The oil separators and facilities for discharge of the wastewater from the steel making area into the Blast Furnace terminal settling basin is proceeding well. Here again the date was 12-31-69 and it is estimated that this is fifty-five percent complete.

I might add that the coke plant wastes have been connected to the Gary sewer system and they are being treated in the Gary activated sludge plant.

Youngstown Sheet and Tube Company, East Chicago. Construction was completed during February 1969 on the waste treatment facilities for the Buttweld Mill. The quarterly progress report dated July 30, 1969, and inspections by representatives of the Board during late July show that construction is proceeding well on the central water treatment plant to serve the tin mills and cold reduced sheet mill for the Blast Furnace recirculation system and Terminal Lagoon. Table I summarizes the time schedule and status of each project. And if you will turn to Table I, which is about the third page in the table, you will note the Buttweld Mill pressure filters had a completion date of 12-31-69. They were completed in February of 1969. And the Hot Rolling Mills, as I mentioned earlier, had a completion date of June 30, 1969, and that was met. The other three jobs are the No. 1 Tin Mill, No. 2 Tin Mill and the No. 2 Cold Reduced Sheet Mill, which is 12-31-69. It is under construction and estimated ninety percent complete. So it ought to be done well in advance of the December 1969 deadline.

Blast Furnace area was June 30, 1970, and it is under construction and estimated at about eighty percent complete.

And finally, the North Terminal Lagoon, which is a kind of a catch-all and save-all, with a deadline of 6-30-70,and it is under construction now and on schedule.

Inland Steel Company, East Chicago. Construction was completed on the waste treatment facilities for the new 12-inch Merchant Mill during the first quarter of 1969; however, the Mill will not start operation until the fall of 1969. This I emphasized was a new facility. The quarterly progress report dated August 4, 1969, and inspections by representatives of the Board during early August show that construction is progressing very well on the terminal oil and solids removal facilities. All other scheduled projects have been completed. The completion date for the terminal oil and solids removal facility was May 1, 1970. We think that is on schedule.

That is all, Mr. Chairman.

(Table I, to which Mr. Poole referred, is as follows:)

TABLE I

Facilities Proposed and Under Construction
Indiana Steel Mills

UNITED STATES STEEL CORPORATION
GARY, INDIANA

Gary Steel Works (Now Gary Works East)

Project	Contaminants to be removed	Completion date	Status
Blast Furnace Area - Additional settling basins for flue dust, oil separators in power station and waste segregation	Oil and suspended solids	12/1/69	Project is over 60 percent complete and on schedulc
Steel Making Area - Construction of oil separators and segregation of wastewater with discharge to the Blast Furnace area flue dust settling basin	Oil and suspended solids	12/31/69	Project is over 55 percent complete and on schedule
Hot Mills Area - Construction of sewers, sumps, pumps, piping and settling and oil skimming basins	Oil and suspended solids	12/31/69	Project is over 45 percent complete and on schedule
Gary Sheet and Tin Mill (Now Gary Works West)			
*Segregated wastewa$\overset{t}{g}$er from the Tin Mill will be discharged to the existing 6-Stand Tandem Cold Reduction Mill (Terminal) treatment plant	Iron, suspended solids, free oil, emulsified oil and BOD	6/30/69	Completed and placed in service 6/30/69

*The 6-Stand Tandem Cold Reduction Mill (Terminal) treatment plant was expanded to handle the additional waste flow from the Sheet Mill and Tin Mill.

TABLE I (continued)

Project	Contaminants to be removed	Completion date	Status
Gary Sheet and Tin Mill (Now Gary Works West) (continued)			
*Segregated wastewater from the Sheet Mill will be discharged to the existing 6-Stand Tandem Cold Reduction Mill (Terminal) treatment plant	Iron, suspended solids, free oil, emulsified oil and BOD	6/30/69	Completed and placed in service 6/30/69
**Wastewater from the 80-inch Hot Strip Mill scale pits will be diverted to the 84-inch Hot Strip Mill filtration plant	Iron, suspended solids and oil	3/1/70	Authorized

*The 6-Stand Tandem Cold Reduction Mill (Terminal) treatment plant was expanded to handle the additional waste flow from the Sheet Mill and Tin Mill.

**Studies of the operation of the 84-inch Hot Strip Mill filtration plant show that the existing filtration facilities can handle the additional 22,500 gpm from the 80-inch Hot Strip Mill scale pit without expanding the facilities. Reuse of certain waters reduced the wastewater flow and will permit acceptance of the additional wastewater through existing facilities.

TABLE I (continued)

YOUNGSTOWN SHEET AND TUBE COMPANY
EAST CHICAGO

Project	Contaminants to be removed	Completion date	Status
Buttweld Mill - Pressure filters	Oil and suspended solids	12/31/69	Completed and placed in operation 2/5/69
Hot Rolling Mills - Terminal lagoon for secondary clarification of effluent	Oil and suspended solids	6/30/69	Placed in operation on 6/30/69. Additional oil skimming equipment will not be delivered until November 1969
No. 1 Tin Mill, No. 2 Tin Mill and No. 2 Cold Reduced Sheet Mill - A central wastewater treatment plant for chemical treatment of oils and suspended solids.	Oil and suspended solids	12/31/69	Under construction (90 percent completed)
Blast Furnace - Sewers, sumps, and pumps to collect and recirculate all clarified waste from the blast furnace. No discharge to the receiving stream .	Cyanide, oil and suspended solids	6/30/70	Under construction (80 percent completed)
North Lagoon - A settling lagoon to collect treated wastewater from the No. 5 Stand of the Tandem Rolling Mill, sewer No. 23 and the No. 3 Hot Strip Mill. All effluent from the lagoon will be recirculated. No discharge to the receiving stream.	Oil and suspended solids	6/30/70	Under construction and on schedule

TABLE I (continued)

INLAND STEEL COMPANY
EAST CHICAGO

Project	Contaminant to be removed	Completion date	Status
Terminal settling and oil skimming basin	Oil, suspended solids and iron	5/1/70	Under construction and on schedule

MR. STEIN: Thank you.

Are there any comments or questions?

In case you think there isn't progress being made, I will say this is a very good progress report. The reason is that this is the face of the program and how this happens, as you know, meeting after meeting Adolph Plating was recalcitrant and not moving. Indiana took them to court; they are moving.

The Steiner Tissue Company has been completed and several of the other mills in Indiana are on stream and they are all pretty much on schedule.

So, again, while we place a lot of emphasis on certain discharges from time to time, we should not forget the general picture in the area in which we are moving with mill after mill. As you can see from this latest Indiana report we have, the list of any noncompliers or alleged noncompliers gets smaller each time. That is what we have to keep our eye on and on narrowing this list.

Thank you very much, Mr. Poole.

May we hear from Mr. Klassen on Illinois.

Mr. Klassen.

CLARENCE W. KLASSEN, TECHNICAL SECRETARY
ILLINOIS SANITARY WATER BOARD
SPRINGFIELD, ILLINOIS

MR. KLASSEN: Mr. Chairman, referring to the area within the conference area coming under the jurisdiction of the Illinois Sanitary Water Board:

American Agricultural Chemical in Chicago Heights. This company is now in compliance with the provisions of the enforcement conference. They have annexed the property to the Sanitary District of Bloom Township. They have made the connections to the Sanitary District plant of Bloom Township and the Sanitary sewer system. The new and the expanded plant of the Bloom Township Sanitary District will be completed in about thirty days or by the end of September.

Midwest Forging and Manufacturing Company in Chicago Heights. This company is in compliance with the provisions of the enforcement conference. The company has installed a closed neutralization system. An oil bath system is closed with no connection to the stor sewer tributaries to the waters of the State.

Referring to the State Street Ditch or the storm sewer that was involved, the Stauffer Chemical Company at Chicago Heights is in compliance with the provision of the enforcement conference. All discharge to the storm sewer tributary to the State Street Ditch has been eliminated. Since any waste discharged from the Stauffer Chemical to the ditch would be the result of equipment malfunctioning or accidental spills, to safeguard against this the company is sealing all floor drains which would carry flow from the spills to the storm sewer.

Calumet Steel, Chicago Heights, is in compliance. Previously the mill scale waste was discharged through settling basins to the storm sewer. The Calumet Steel has completed a project to close this system and is now recycling all of their water.

In its operation this summer they found that during hot weather there was an increase in the hot water in their recirculation system which required at times to bleed off a small amount of warm water for makeup. To correct this particular situation, the company is installing cooling towers so that this will be in operation and this will not take place during the next warm weather season.

All of the other municipal plants within the jurisdiction of the Sanitary Water Board in this area as previously listed in the conference are all in compliance.

MR. STEIN: Thank you, Mr. Klassen.

Any comment or question?

If not, thank you very much--

MR. DUNSMORE: Mr. Stein.

MR. STEIN: Yes.

MR. DUNSMORE: May I ask Mr. Klassen a question?

MR. STEIN: Yes, go right ahead.

MR. DUNSMORE: In view of what you have stated about U. S. Steel's plans, do you want us to transmit to you a copy of our plans and our work schedule that has been transmitted to the Metropolitan Sanitary District?

MR. KLASSEN: No. The prime responsibility for enforcement, as you and the Sanitary District have stated, is the Metropolitan Sanitary District of Chicago and it is that agency that should transmit any requests for extensions or any plans that they want us to review.

MR. DUNSMORE: All right. Well, I would like to at least leave it that we have plans that we are willing to submit if you have any desire for them.

MR. KLASSEN: Thank you.

MR. STEIN: Are there any other comments or questions?

If not, thank you.

Again let me indicate with both the State reports and the reports we have gotten from the steel companies--I hope we will get this from the Federal installations--this is a situation that I don't think we have really had before, at least with our schedule, which is on the encouraging side. That is I see not one of these places where there is no progress. I don't mean when I say no progress that they are not doing anything. There are no recalcitrants here. Every one of these sources is moving ahead with a remedial program as outlined by the conferees, by the State and the local agencies. The sole question in some of the cases is date and I think this is the first time we could have said this from the reports we have gotten. You remember, you people who have been with us, that when we first started the progress seemed very slow, then a few began to move. But now I think, unless there is a slippage, we have 100 percent movement, which is quite something.

Mr. Poston, do you want to call the Federal installations now or not?

MR. POSTON: Yes, sir.

Mr. Gamet has a very brief report on Federal installations which covers all of those in this area.

MR. STEIN: I hope the record doesn't fall down here.

MERRILL GAMET, CHIEF

FEDERAL ACTIVITIES COORDINATIONS BRANCH

FWPCA, GREAT LAKES REGION, CHICAGO, ILLINOIS

MR. GAMET: Mr. Chairman, conferees, ladies and gentlemen.

My name is Merrill Gamet. I am Chief of

the Federal Activities Coordinations Branch of the Federal **Water** Pollution Control Administration, Great Lakes Region.

The status of compliance of Federal installations with the recommendations of this conference was last reported to the conferees at the January 29, 1969, reconvened session. At that time it was reported that all installations in the conference area were in compliance with the conferees' recommendations, and there has been no reported change in the status of such compliance. These installations are as follows:

U. S. Coast Guard, Indiana Harbor Light Station;

General Services Administration, DMS Depot, Hammond, Indiana;

Naval Reserve Training Center, Gary, Indiana;

Corps of Engineers, T. J. O'Brien Lock & Dam;

U. S. Army, NIKE Missile Sites:

CG-47, Wheeler, Indiana (closed since last conference)
CG-32, Chesterton, Indiana
CG-45, Gary, Indiana
CG-46, Munster, Indiana

Continued surveillance will be conducted on a periodic basis to insure that these installations remain in compliance with the conference summary.

Federal vessels have not previously been reported at the Calumet Area Enforcement Conference. The following is a brief report on vessels in the Calumet Enforcement Conference area:

(a) The Corps of Engineers Hopper Dredge "HOFFMAN" will perform dredging operations in the Calumet River from about September 4 to November 22, 1969. Selected areas will be dredged from about 130th Street to the Turning Basin. Dredged materials will be deposited in an alternate spoil area near 130th Street. This floating plant with forty-four crew members has a holding tank which discharges overboard with no treatment. Funds have been requested by the Corps for fiscal year 1970 to install secondary treatment facilities. It is recommended that until such time as adequate treatment facilities are installed, the Corps of Engineers engage the services of a private contractor to pump out the holding tank as needed.

(b) The Corps of Engineers Tug "MOORE"

visits the Calumet Enforcement Conference area intermittently on survey duty. The area visited is from the O'Brien Lock & Dam to Calumet Harbor. This vessel is equipped with a macerator/chlorinator. It has been reported by the Corps of Engineers that this equipment has proven to be unsatisfactory, because of frequent malfunctions. The Chief of Engineers office is presently evaluating other types of waste treatment or holding equipment. As soon as a decision is reached regarding adequacy and economic feasibility, a directive will be issued to replace macerator/chlorinators on all vessels now equipped with these units.

This concludes the report.

MR. STEIN: Any questions or comments?

Well, let me start. I thought we came up with the notion that on the lakes we would have closed systems on the boats, all the States went along with it. Is that correct?

MR. GAMET: It is correct, except that all Corps of Engineer vessels, as I think most everybody is aware, are equipped with macerator/chlorinators, that is most of them.

MR. STEIN: Let's get out to the first one, the HOFFMAN. That has a closed system. As I understand it, the proposal is not to have the closed system and pump it out but to put in a secondary treatment plant.

In other words, you are asking the HOFFMAN to do something that we and the conferees agreed we weren't going to do in the Great Lakes?

MR. GAMET: No, the Corps of Engineers has planned--they have already installed on another dredge known as the MARKHAM an extended aeration or package treatment plant on that floating plant, which is in process of testing and evaluation at the present time. The Corps is requesting funds for installing the same or similar type of equipment on all floating plants of the same type. I can't tell you how many vessels there are involved.

MR. STEIN: This just compounds it. What do they do with the effluent from that?

MR. GAMET: The effluent, I presume, after treatment by the extended aeration or package treatment plant plus chlorination would be discharged.

MR. STEIN: Well, it is going to contain nutrients and this was precisely the subject of discussions here over and over again where we and all the Great Lakes States, both of Michigan and Erie, agreed that we wouldn't go for this. And is this the kind of thing we are doing in our own Federal boat program?

MR. GAMET: Well, the Corps of Engineers has this in progress at the present time and--

MR. STEIN: Did you call the recommendation of the conferees to the attention of the Corps?

MR. GAMET: We have called it to their attention, yes, sir.

MR. STEIN: Well, I think I will make the recommendation on this we had better start doing our own homework on this one, because I can't see making a recommendation like that and going along with this and putting this in as, quote, a progress report. This may be going backwards.

MR. KLASSEN: I have got a more practical suggestion, Mr. Chairman, than recommendation, because as of January 1, 1970, they will be in violation of the Illinois Sanitary Water Board rules and regulations that prohibit this type, and we will take suitable action against the Federal Government. (Laughter and Applause.

MR. STEIN: I wish you hadn't said that, Mr. Klassen, because, you know, on the matter of principle, I would have to argue you had no jurisdiction and I think I could win. I would like them to clean up, but you really can't do that.

MR. KLASSEN: We can try.

MR. STEIN: I know, you can try.

(Laughter.)

But I really do think, Mr. Gamet, we have to get to work on this.

MR. GAMET: I agree 100 percent.

MR. STEIN: All right.

Mr. Poston, can we have your assurance we are going to do this?

MR. POSTON: You have that.

MR. STE~~I~~IN: I really can't see how we can live with this.

All right. Are there any other comments or questions?

If not, let's see if we can get on with a summary.

SUMMARY

MR. STEIN: I do think in this conference, one, that the conferees have some work to do with their own vessels in the Great Lakes; and if we are going to have sealed systems and no discharge from heads on boats, this should be as applicable to the Federal boats as to other boats on the lake.

Number two, we have accepted the reports both from Indiana and Illinois and the Sanitary District. All of the installations are either moving under court order or they are in compliance with schedules previously brought forward and agreed on by the conferees from both Indiana and Illinois and endorsed by the conferees, with the following exceptions:

The Sanitary District reports that there are several companies not in compliance with the effluent criteria, that is Gulf Oil, Cargill Corporation, Catalin Corporation, Ford Motor Company, Interlake Steel Company Chicago plant and Wisconsin Steel Company. I think the Sanitary District has also indicated that it has a very active program to secure such compliance, that it has taken active action in every

SUMMARY

case, that it has taken the kind of action which it seems to me is the most they can do under applicable law and regulations and the standards that we have. And as far as those corporations--I throw this out for the consideration of the conferees--while we may consider these companies in technical noncompliance, I think we should endorse the program of the Sanitary District vis-a-vis these companies and if the date of the program that was indicated here is missed that we may take that up again.

Does anybody believe they are not taking effective action toward them?

If not, then let us move on that.

Now, we do have the situation with the Republic Steel Corporation and the United States Steel Corporation South Works. Both of these corporations have an outstanding date of September 30, 1969, to complete their works at the present time. I think it is fair to say, in view of the facts adduced here, that these works will not be completed in any event, whatever is done by that date, by 1969.

SUMMARY

In the case of Republic Steel, the Sanitary District of Chicago has reviewed the plans and forwarded these plans to the Illinois Sanitary Water Board with a recommendation that an extension until December 30, 1970, be authorized. Illinois has looked over the plans from a technical point of view and has indicated that the construction of these works, in its opinion, would produce the kind of water quality it requires and had sent them forward to the Department of the Interior and they have been adopted by the Secretary of the Interior. The compliance with this would also put Republic Steel Corporation in accord with the recommendations and requirements of this conference. The Illinois Board has not, however, yet acted on this request for an extension in line with its policy not to act on such requests until the date of expiration comes up.

I think we possibly have one or two proposals : 1) unless Illinois requests the Federal Government to take action, we should wait for Illinois to act. Now, Illinois presumably can do one of two major things--and this is not to preclude their judgment--either they are going to grant an extension or a modification of that or not grant an extension. If they do not grant an extension, then I think Illinois has made its position clear, both from the administrative agency and the Attorney General's office, if someone is in noncompliance the State agency will institute action under State law to comply. I think we in the Federal Government--and I just put this out--would encourage Illinois to do that. We certainly would not want to displace Illinois. And the question here is if they are in noncompliance whether we will join Illinois or start a companion suit of the Federal Government.

However, if Illinois does grant an extension to Republic Steel, I think this should be made known to the conferees. The conferees would get together to make a determination of what we were going to do with this and whether we were going to recommend that the Secretary take action or go along with this extension. I think the facts of the situation are that if a recommendation for an extension comes forward under the procedure you have heard, the request would have to be made by the Sanitary District, so this would be one conferee, and approved by the Illinois State agency, which would be another conferee. And if their judgment is made, then this would have to be put forward under our procedure to the Indiana and the Federal conferee to see if they agreed to it and made this recommendation.

I think if nothing happens by September 30,in any event, and there could be some inaction, that there would be a violation of the Federal standard as well; and at least the proposal I would put out to you, Mr. Poston, I would see no alternative than the company being in violation of the Federal requirement and we recommend particular action in that case. And certainly if the State feels that it wants us to handle it after September 30 that would be the point.

Now, the next problem we come to is U. S. Steel. As I understand it, there has not been a request from the Sanitary District to Indiana for an extension of U. S. Steel.

MR. POOLE: Illinois, Mr. Chairman.

MR. STEIN: Illinois. I stand corrected, sir. I am traveling east.

Illinois has not been requested. It has been indicated that given the relationships of the Sanitary District and Illinois that the procedural matters can be overcome and a determination might be made by Illinois by September 30, or the first meeting after September 30, as to whether that extension would be made or not the first time they can bring it up under regular business, and this goes for both cases.

If Illinois would grant an extension to U.S. Steel, again this matter would be taken up by the conferees. If Illinois did not grant an extension, Illinois has indicated that it would institute appropriate action, and if Illinois did nothing I think I have indicated that the Federal Government would have an obligation. In any event, if the States wanted the Federal Government to intervene in these cases and take action, and we could only do it if a date were violated, this State would only have to make that clear and the

Federal Government would do it.

Now, I don't want to put a black mark on this, because I don't want to get this case out of perspective. What we are dealing with here is the windup of probably the biggest municipal-industrial cleanup in the country. What we are dealing with are companies, in the case of Republic Steel and U. S. Steel, who have spent a vast amount of time and money and have come forth with detailed plans and specifications that are going to do the job.

The sole question we have here is the time that they are going to do the job, and what we are in a sense dealing with is a timetable which might be two years beyond the original date.

Now, I would like to point out to the conferees and the people here that the conferees already have endorsed, specifically and not just tacitly, several dates beyond that December 1968 date, and in reviewing the reports we have seen these come in. There are a series of industries in Indiana which are going to be completed beyond the December 1968 date.

SUMMARY

There are also, in addition to the two industries I have mentioned, a series of six industries that Mr. Bacon outlined this morning, and I repeated, which I suggested here if the conferees will agree we might consider just in technical noncompliance and feel that they have an active program to clean up.

So I would not like this taken out of perspective, since the situation with U. S. Steel and with Republic Steel on these dates is still under consideration--that they are the only two industries in the area of what we consider an eminently successful program for which the date of December 1968 has not been met.

This is, I know, going to be a very serious consideration or decision for all the agencies concerned. I know the Sanitary District is going to have to make a decision on what they are going to ask Illinois. I know Illinois is going to have to make this decision on what they are going to do about the request, certainly the request they have on Republic and if they get a request on U.S. Steel. And the Federal Government is going to have to make a determination on what to do once Illinois acts or the September 30 date passes.

I think it behooves all concerned, the industries, the regulatory agencies, and the others concerned to try to work with this and follow this on a step-by-step basis, and this is when procedure is going to pay off. It is something like one of these national conventions you see. Somehow a decision comes out if you follow the procedure. I think we have outlined with particularity what the situation is; all the facts have been laid bare here; and I would suggest that that be the summary and we carefully follow the procedure. Now for a recap. Mr. Poston will get to work on these boats and see if they can be brought in compliance with the rest of the operation. The conferees will consider the six industries named by Mr. Bacon to be possibly in technical noncompliance but that the State has a very active program to do this. And we will seek future reports on whether these States have complied.

We will wait until the meeting after September 30 or the appropriate meeting of the Illinois

Water Board for its action or inaction on United States Steel and Republic Steel. If there is a recommendation for an extension we will take this up with the conferees to see if they will endorse it. If there is a recommendation for a nonextension, the State of Illinois will take action and the Federal representatives will take it up with the people in Washington to see if we will join or have a suit with Illinois. If no action is taken, the Federal people will make a recommendation on action under Federal law to seek compliance.

We will ask the technical committee--best things are covered last and that is where, really, the work is going to be done--we will ask the technical committee to have within the hands of the conferees in the next four months a detailed report on its prognosis--and don't wait until you perfect this, because we are going to have to start working on this--a detailed report on its prognosis of whether the remedial program under way is going to produce the water quality which we expect. If it is not, its recommendations for improving that. Once that gets into the hands of the conferees and their technical staff, we would ask your careful review, and hopefully when we get back next time on this we will be in complete agreement on the technical facts involved--there should be no disagreement on that--because if we are going to make an adjustment on the program and it is not going to work, we should do it now.

Are there any other comments or questions?

Now--

MR. SPEARS: Mr. Chairman, I requested an opportunity to make a statement this morning. My name is Lawrence Spears.

MR. STEIN: All right, I will let you make a statement. Just a moment.

MR. SPEARS: Thank you.

MR. STEIN: Are there any other comments or questions?

If not, will you come up, Mr. Spears.

MR. SPEARS: Thank you.

MR. KLASSEN: We ought to know who he is representing.

MR. STEIN: Will you identify yourself

and who you are going to represent, sir?

MR. SPEARS: Yes.

LAWRENCE D. SPEARS
BUSINESSMEN FOR PUBLIC INTEREST
CHICAGO, ILLINOIS

MR. SPEARS: My name is Lawrence D. Spears. I am a student at the University of Chicago law school and a resident of Hyde Park in Chicago. This statement will be very short.

Conferees, ladies and gentlemen.

Those industries found to be demonstrating good faith in attempting to comply with the conference deadlines were granted extensions at the last meeting of this conference. The conferees rather clearly felt neither Republic nor U. S. Steel had shown good faith. It may well be that because of earlier delays it is no longer practicable to control pollution from these two plants before the date they now propose, December 31, 1970, for both Republic and U. S. Steel. But the conference ought to be very sure that these schedules cannot be accelerated before approving them in any sense.

For example, U. S. Steel's settlement in the Metropolitan Sanitary District suit shows that the November 1971 date proposed to the conference last January was more lenient than necessary. This indicates the question of candor on the part of U. S. Steel.

Further, the conference should consider ordering a partial shutdown closing those parts of any plant that are not in compliance and recommending that the United States Government itself purchase no steel from these companies so long as they are in violation.

Moreover, the conference ought to assure compliance with the proposed new schedules by requiring the companies to post substantial performance bonds providing for the forfeiture of, say, $10,000 per day in the case of default. If these companies are confident that they can comply with the dates that are proposed, they should have no objection to posting these bonds for they will never pay them. But experience in the past has shown that these companies go from one date to the next having confidence each time that they will be given extensions of the schedule, as has been indicated here today.

Moreover, the apparently callous disregard of conference recommendations ought not to go unpunished. The conference should ask the Illinois Attorney General under powers granted to him by the statute in June of 1969 to prosecute the two companies for polluting the water and to seek the imposition of substantial fines. Without penalties, a polluter is likely to feel that he can ignore the conference as Republic and U. S. Steel seem to have done with impunity.

Finally, the conference should be asked to forbid all discharges to Lake Michigan. The lake is uniquely valuable for recreation, water supply and other uses requiring clean water, and because of its extremely low outflow it is uniquely hard to clean after wastes have been dumped into it.

It is clear that there has been a demonstrated lack of good faith with the people of Chicago both by Republic and U. S. Steel. It is clear that no attempt has been made to offer overtime in order to accelerate the schedules for compliance of these two companies.

Second, the negotiations with U. S. Steel, they have not submitted specific plans for how they will comply with the guidelines of this conference. Both of these companies have confidence that the State agencies involved and this conference will at the appropriate time give them extensions. At the end of those new schedules they will give them continued extensions. This confidence was demonstrated clearly today.

There is also a lack of respect for these conferees. The lack of detailed information by the steel companies, assuming that slides are sufficient information in lieu of technical data, and the lack of specific plans and the fact that they have not as yet requested the appropriate State agencies within a month of the deadline, understanding that they have complete confidence that these agencies will simply agree to those extensions without further ado.

Thank you.

(Applause.)

MR. STEIN: Thank you, Mr. Spears, for your comments.

You know, I am going to say something,

and I hope the group that is here and I know is trying to work on this will just listen to this for awhile, because we all want water pollution control and if we talk in certain senses at cross purposes we are just not going to get it.

One, the U. S. Steel and Republic have given detailed plans which we can understand. They weren't in those slides. They can be inspected in the offices. The kind of reports they have are meaningful to the conferees up here.

Now, if you have been attending the conferences through the years, you know that the one thing I have been after people about is the sketchiness of plans and reports. The point is, again--and we have done this in other places, and you have seen plant after plant built--both in this experience and past experience the record shows that when U. S. Steel or Republic says they are going to do something that they are going to do it. They produce and they do it and the plans are detailed.

The next thing you talk about, and once we start on this it is very hard to get together, there has been no implication here that anyone acted in bad faith. It is the easiest kind of thing to turn the metaphysics into the reality. When we talk about good faith or bad faith, we generally talk about a person. If you are going to equate that with a corporation and attempt to use those terms when they are making corporate decisions or if you think there is a cabal or a conspiracy and government is run that way and there is a conspiracy among the conferees, you are never going to get anywhere. But you can always explain, you can always explain these events that way.

Let me tell you the way I see it here. We have dealt with a very complicated case in this area. We have moved forward in cleaning up this case, and I think the record will show we have made faster progress here in a very complicated situation than was done anywhere else in the country. We have moved since 1965 getting the bulk of the industry cleaned up, we are cleaning up the last ends of it. It always gets a little tricky or a little messy because we don't march in goosestep together. I wish we could throw a switch on each plant the same day and get them all operating, but we don't work that way in a democracy.

But what bothers me, gentlemen, is this. When we finally get the case where hundreds of millions of dollars are spent, where we are getting 100 percent compliance and the industries and the municipalities are going, if we keep getting cries of bad faith, whatever the reason, and you may push for a closer date or higher treatment or anything of that kind, but if we get in a situation like this with cries of bad faith, I don't know how we are going to work in a democratic society this way.

I think the answer in here is this. While goodness knows, I may have had differences through the years with Mr. Klassen, with the representatives of U.S. Steel, with the representatives of Republic Steel, with Mr. Poole, and even my Regional Director here, Mr. Poston, never once did I think that any one of those people was guilty of bad faith. And I hope that they did not consider I was guilty of bad faith.

Let me again try to give you this. And you know, the last speaker was from the law school. The Attorney from Republic Steel is here, Mr. Pitts, who is a very highly respected member of the bar. We have had many differences through the years, but we have kept talking to each other. If we ever had the notion that either one was not dealing in a thoroughly professional manner or was dealing in bad faith, we would not have been able to move the way we have through the power of negotiation.

And I say to this group who is here now, please, please try to think of this as a democratic process in action. You are not dealing with alien enemies who want to destroy you. You are dealing with people who are citizens of your own country, who are as firmly committed to the democratic process as you are, and who may have a different point of view. The magic is that we can get an accommodation in processes like these. And I hope we are not going to let that break down.

Are there any other comments or questions?

If not, thank you all for coming and we will stand adjourned.

(Whereupon, at 4:00 p.m., the conference was adjourned.)

The following document was submitted after the close of the conference.)

STATEMENT OF CONGRESSMAN EDWARD J. DERWINSKI (ILL. - 4TH DIST.) AT CALUMET AREA FEDERAL-STATE ENFORCEMENT CONFERENCE

August 26, 1969

Mr. Chairman:

I welcome this opportunity to participate in the Calumet Area Federal-State Enforcement Conferenceto resolve cleanup dates for two major industrial polluters of Lake Michigan and its tributaries.

First, as a legislator may I remind you of my introduction of H.R. 3263, to allow an incentive tax credit for a part of the cost of constructing or otherwise providing facilities for the control of water or air pollution and to permit the amortization of such cost within a period of from one to five years.

Water pollution has become a major problem across the country and the answer lies in giving this question major priority in the Federal budget.

News reports have accurately described the buck-passing routine between Federal, State and Sanitary District authorities and their counterparts in other states bordering on Lake Michigan.

The public's interest must be protected at all costs and this requires not only proper Federal financing, but complete coordination with local, state and regional authorities. In addition, a substantial amount of funds for water and air pollution control devices must come from private industry.

It is my feeling that where local and state governments can move effectively and quickly to abate pollution they should do so. Where state and local authorities fail to move or do not achieve abatement, then the Federal Government will do so.

In our area basic jurisdiction lies with the Metropolitan Sanitary District and they are the key to the coordination which must be achieved between Federal state and local authorities.

I wish to assure participants in the Conference that concern over the problem of water and air pollution is receiving priority attention from Federal officials, and that Congress recognizes that measures in this vital field are long overdue.

The challenge is clear. I trust that the results of this Conference will be a constructive attack on the water pollution problems in the Calumet region.

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